

**FILE COPY**

CHECKED FOR COMPLETENESS  
OF PARAMETERS ORDERED BY:

*TGJ/mc* 2-16-11

**OLIN CORPORATION  
WILMINGTON  
SDG: WIL-7  
SC5256, SC5326, SC5415, SC5605**

**KATAHDIN ANALYTICAL SERVICES, INC.  
600 TECHNOLOGY WAY  
SCARBOROUGH, ME 04074**

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# SAMPLE DATA PACKAGE

**SDG NARRATIVE**  
**KATAHDIN ANALYTICAL SERVICES**  
**OLIN CORPORATION**  
**WILMINGTON**  
**WIL-7**  
**SC5256, SC5326, SC5415, SC5605**

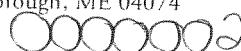
**Sample Receipt**

The following samples were received on September 4, 10, 12 and 19, 2009 and were logged in under Katahdin Analytical Services work order numbers SC5256, SC5326, SC5415 and SC5605 for a hardcopy due date of October 8, 2009.

KATAHDIN	OLIN CORPORATION
<u>Sample No.</u>	<u>Sample Identification</u>
SC5256-1	OC-SB-472-30/32-XXX
SC5326-1	OC-SB-450-0.0/1.0-X
SC5326-2	OC-SB-450-8.0/10-XX
SC5326-3	OC-SB-466-30/32-XXX
SC5326-4	OC-SB-466-6.0/8.0-X
SC5326-5	OC-EBK-008
SC5415-1	OC-SB-427-0.0/1.0-X
SC5415-2	OC-SB-434-0.0/1.0-X
SC5415-3	OC-SB-434-7.0/9.0-X
SC5415-4	OC-SB-456-0.0/1.0-X
SC5415-5	OC-SB-456-16/18-XXX
SC5415-6	OC-SB-456-7.0/9.0-D
SC5415-7	OC-SB-456-7.0/9.0-X
SC5415-8	OC-SB-457-0.0/1.0-X
SC5415-9	OC-SB-457-8.0/10-XX
SC5605-1	OC-SB-413-0.0/1.0-X
SC5605-2	OC-SB-413-1.0/5.0-X
SC5605-3	OC-SB-435-0.0/1.0-X
SC5605-4	OC-SB-435-11/15-XXX
SC5605-5	OC-SB-435-6.0/10-XX
SC5605-6	OC-EBK-012

The samples were logged in for the analyses specified on the chain of custody form. All problems encountered and resolved during sample receipt have been documented on the applicable chain of custody forms.

We certify that the test results provided in this report meet all the requirements of the NELAC standards unless otherwise noted in this narrative or in the Report of Analysis.  
Sample analyses have been performed by the methods as noted herein.



Should you have any questions or comments concerning this Report of Analysis, please do not hesitate to contact your Katahdin Analytical Services Project Manager, **Andrea J. Colby**. This narrative is an integral part of the Report of Analysis.

### Organics Analysis

The samples of SDG WIL-7 were analyzed in accordance with "Test Methods for Evaluating Solid Wastes: Physical/Chemical Methods." SW-846 , 2nd edition, 1982 (revised 1984), 3rd edition, 1986, and Updates I, II, IIA, III, IIIA, and IIIB 1996, 1998 & 2004, Office of Solid Waste and Emergency Response, U.S. EPA, and/or for the specific methods listed below or on the Report of Analysis. Sample SC5415-7 was used for the matrix spike (MS) and matrix spike duplicate (MSD), as per client request. Some manual integrations may have been performed due to split peaks and/or corrected baselines. All have been flagged with an "M" (software-generated) on the pertinent quantitation reports.

#### 8033M DMF Analysis

All samples except SC5605-1, 2, 3 and 6 were manually integrated for the surrogate diethylformamide (DEF). The specific reasons for the manual integrations are indicated on the raw data by the manual integration codes (M1-M11). These codes are further explained in the attachment following this narrative.

The sample with the client ID OC-SB-456-7.0/9.0-X (laboratory ID SC5415-7) exceeds the 19-character limit of the Katahdin Analytical Services' organics forms processing system when appended with the MSD designation. Therefore, the first three characters ("OC-") in the client ID for this sample were omitted on all forms for the sample, MS, and MSD analyses.

The LCS WG68776-2 had a low recovery for the spiked analyte dimethylformamide (DMF), which was outside of the nominal acceptance limits. Since the LCSD spike recovery was acceptable, the associated samples were not reextracted.

The LCS WG68986-2 had a low recovery for the spiked analyte DMF, which was outside of the nominal acceptance limits. Since the LCSD spike recovery was acceptable, the associated samples were not reextracted.

The closing calibration verification (CV) (file BCI6076) had a low response for DMF, which resulted in a %D that was outside of the laboratory acceptance limits of 25%. Since the associated LCS/LCSD had acceptable DMF recoveries, the other associated samples were not reanalyzed.

The closing CV (file BCJ2112) had a low response for DEF, which resulted in a %D that was outside of the laboratory acceptance limits of 25%. The associated samples may be biased low for the surrogate DEF.

There were no other protocol deviations or observations noted by the organics laboratory staff.

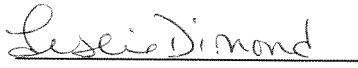
### Wet Chemistry Analysis

The samples of SDG WIL-7 were analyzed in accordance with the specific methods listed on the Report of Analysis.

Analyses for total solids were performed according to "Standard Methods for the Examination of Water and Wastewater", 15th, 16th, 17th, 18th, 19<sup>th</sup>, and 20th editions, 1980, 1985, 1989, 1992, 1995, 1999. APHA-AWWA-WPCF.

All analyses were performed within analytical holding times, and all quality control criteria were met.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Operations Manager or the Quality Assurance Officer as verified by the following signature.

  
Leslie Dimond  
Quality Assurance Officer  
10.13.09

## Katahdin Analytical Services, Inc.

### Manual Integration Codes For GC/MS, GC, HPLC and/or IC

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

## Katahdin Analytical Services, Inc.

## Sample Receipt Condition Report

Client:	MacTec / Olin	KAS PM:	AJC	Sampled By:	Client
Project:		KIMS Entry By:	DD	Delivered By:	Client
KAS Work Order#:	SC5255 / SC5256	KIMS Review By:	AC	Received By:	DD
SDG #:	Cooler: 1 of 1	Date/Time Rec.:	9-4-09 1615		

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	✓				
2. Chain of Custody present in cooler?	✓				
3. Chain of Custody signed by client?	✓				
4. Chain of Custody matches samples?	✓				
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.	✓				Temp (°C): 0.1
Samples received at <6 °C w/o freezing?	✓				Note: Not required for metals analysis.
Ice packs or ice present?	✓				The lack of ice or ice packs (i.e. no attempt to begin cooling process) may not meet certain regulatory requirements and may invalidate certain data.
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals analysis.
6. Volatiles free of headspace: <b>Aqueous:</b> No bubble larger than a pea <b>Soil/Sediment:</b> Received in airtight container?				✓	
Received in methanol?				✓	
Methanol covering soil?				✓	
7. Trip Blank present in cooler?				✓	
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2 Sulfide - >9 Cyanide – pH >12				✓	
				✓	
				✓	
				✓	

\* Log-In Notes to Exceptions: document any problems with samples or discrepancies or pH adjustments

All samples changed & cat 1 per Tige Cunningham 9/8/09.

0000006

**Andrea Colby**

**From:** Cunningham, Tige [TLCunningham@mactec.com]  
**Sent:** Tuesday, September 08, 2009 12:37 PM  
**To:** acolby@katahdinlab.com  
**Cc:** Ricardi, Christian; Chatterton, Kelly  
**Subject:** Olin Wilm: Changes to COC of DMF received by Katahdin on 9-4-09

Andrea,  
Attached is the COC with the up-dates to the Category change.  
Please confirm that this change has been made.  
Thanks  
Tige

Katahdin - Soi

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Client	Olin Corporation		
Address:	3855 North Ocoee St. Suite 200 Cleveland, TN 37312		
Phone:	423-336-4511	Fax	423-336-1466
Requested Turnaround Time (Specify)	Regulatory Programs: MADEP MCP _____ Report Requirements: Level IV Package _____ EDD Requirements: MACTEC EQUIS EZ EDD _____		
Standard	Rush _____ (Lab Approval Required)	Superfund _____ Level II Package _____	Job # _____ Lab SDG # _____
			Quote # _____ PO # _____
Shaded Areas for office use only			
		Company Name: Olin Corp	
		Company Contact: ERG Accounts Payable	
		Address: Same as Client	
		Email: SGMarrow@olin.com	Email: _____
		Phone: _____	

MAGTEC

Sample ID	DateTime Collected
MACTEC	
Fraction (11)	
QC Code (3)	
Sample Matrix (3)	
Composite (5) or Step (5)	
Total # of Containers	
CR-6 (3060A / 7199)	
DME (MOD 8033 - GC/NPD)	
DME (MOD 8033 - GC/NPD)	
Opx / Kemperie (180008 - HPLC)	
Percarbonate (6850)	
DMF (MOD 8033 - GC/NPD)	
CR-6 (7199)	
DMF (MOD 8033 - GC/NPD)	
Opx / Kemperie (180008 - HPLC)	
Percarbonate (6850)	
Hydrazine MMH, UDMH (MOD 8315LC/MSMS)	
Hydrazine MMH, UDMH (MOD 8315LC/MSMS)	
Zn Ag	
<--Preservative Type (4) <--Bottle Type (5)	
	Comments (Special Instructions)

## Special Instructions For Lab

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- Notes:  
 1) Fraction T = Total, D = Dissolved, S = SP/LP, C = TCF, N = Not Applicable  
 2) DO Categories: FS = Fixed Sample, TB = Trip Blank, FD = Field Duplicate, EG = Equipment Blank, MS = Matrix Spike, MSL = Matrix Spike Duplicate, PDE = Performance Evaluation Sample, F, B = Field Blank  
 3) Sample Matrix: SW = Surface Water, DW = Drinking Water, GW = Groundwater, NW = Non-Water, NAT = Non-Aqueous Liquid, PR = Product, Q = QC  
 4) Persistence Test: MA = Hydrochloric Acid, NH = Nitric Acid, SA = Sulfuric Acid, Si = Zinc Acetate, ME = Mercuric Me = Mercuric Chloride, DI = Distilled Water

Relinquished: <u>John L. Lewis</u>	Date: <u>7/14/09</u>	Time: <u>6:45</u>	Received: <u>John L. Lewis</u>	Date: <u>7/14/09</u>	Time: <u>6:45</u>
Relinquished: <u></u>	Date: <u></u>	Time: <u></u>	Received: <u></u>	Date: <u></u>	Time: <u></u>
MADEP Requirement					Cooler? Y / N
Samples Iced? Y / N					Deg C

# Cafeteria Soil

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**MACTEC**

Sample ID	Date/Time Collected	Comments (Special Instructions)											
		OC Codes (2)	Sample Matrix (3)	Compounds (3)	OC Codes (2)	Sample Matrix (3)	OC Codes (2)						
OC-SB-472-30/32-XXX	9/4/2009 8:50:00 AM	T	FS SO	G	1	X							
OC-SB-472-8/10-XXX	9/4/2009 7:55:00 AM	T	FS SO	G	1	X							

Category	Category 1 (The 7/8/09)			Category 2			Category 3 (The 9/8/09)		
	OC Codes	Sample Matrix	Compounds	OC Codes	Sample Matrix	Compounds	OC Codes	Sample Matrix	Compounds

## Special Instructions For Lab

### Notes:

✓ Practice Y = Total D = Dissolved S = SLP C = Colloidal N = Nitro Aromatic

✓ OC Codes: FS = Field Sample; TS = Tap/Bank; ED = Endurance; DS = Disk; SLP = Surface; G = Glass; AG = Agar Plate; SC = Sediment; BG = Bulk; P = Plastic; M = Metal; T = Total; F = Filtered; R = Residue

✓ Preservation Type: A = Acetone/ethanol Acid; B = Nitric Acid; C = Sulfuric Acid; D = Methanol; E = Acetone; F = Acetone/Dichloromethane

✓ Basic Type: G = Glass; P = Plastic; V = Vials; GL = Glass Vials; AG = Agar Plates; M = Metal Plates

Cooler? Y / N	MADEP Requirement

Retirnished: <u>9/8/09</u>	Date: <u>9/8/09</u>	Time: <u>10:00 AM</u>	Date: <u>9/8/09</u>	Time: <u>10:00 AM</u>	Date: <u>9/8/09</u>	Time: <u>10:00 AM</u>
Retirnished: <u>9/8/09</u>	Date: <u>9/8/09</u>	Time: <u>10:00 AM</u>	Date: <u>9/8/09</u>	Time: <u>10:00 AM</u>	Date: <u>9/8/09</u>	Time: <u>10:00 AM</u>

0000009

## Olin Wilmington OUI Soil Sampling Categories

There will be three categories of samples submitted to the laboratories during the soil sampling program based primarily on the depth of soil locations. These categories will be identified in notes provided with the chain of custody submitted with samples. The following categories are included:

### Category 1

Soil boring samples 0'-1': request that all samples are analyzed and reported in the normal project turnaround time (TAT).

### Category 2

Soil boring samples from the 1'-10' interval: All samples are analyzed. Rush TAT is requested on a subset of analyses as indicated below:

VOCs: rush 7-day TAT  
SVOCs: NDMA, and phthalic anhydride: normal 30-day TAT  
DMF: normal 21-day TAT  
Hydrazine: rush 7 day TAT  
Metals: normal 30-day TAT (except mercury)  
Mercury: 10 day TAT  
Hexavalent Chromium: 10 day TAT  
Formaldehyde/acetaldehyde: normal TAT  
Anions: normal TAT  
Ammonia: normal TAT

### Category 3

Soil boring samples from >10 ft: Sample are held with analysis pending. For a subset of analyses the samples will be extracted and held by the lab pending instructions from MACTEC-Olin.

VOCs: hold pending results of Category 2  
SVOCs: extract and hold pending results of Category 2  
NDMA: extract and hold pending results of Category 2  
DMF: extract and hold pending results of Category 2  
Hydrazine: hold pending results of Category 2  
Metals: hold pending results of Category 2  
Mercury: hold pending results of Category 2  
Hexavalent Chromium: hold pending results of Category 2  
Phthalic anhydride: extract and hold pending results of Category 2  
Formaldehyde/acetaldehyde: run normal TAT  
Anions: run normal TAT  
Ammonia: run normal TAT

For rush TAT samples the laboratory will provide preliminary results with a narrative and sample results summary report. The lab will also provide data on a preliminary data EDD. Final result and supporting data packages will be provided in the normal TAT for the project.

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## Katahdin Analytical Services, Inc.

## Sample Receipt Condition Report

Client: <u>Olin / Mactec</u>	KAS PM: <u>AJC</u>	Sampled By: <u>Client</u>
Project:	KIMS Entry By: <u>DD</u>	Delivered By: <u>Fed Ex</u>
KAS Work Order#: <u>SC5326 /SC5327</u>	KIMS Review By: <u>ALC</u>	Received By: <u>DD</u>
SDG #:	Cooler: <u>1</u> of <u>1</u>	Date/Time Rec.: <u>9-10-09 1000</u>

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	✓				
2. Chain of Custody present in cooler?	✓				
3. Chain of Custody signed by client?	✓				
4. Chain of Custody matches samples?	✓				
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.	✓				Temp (°C): <u>1, 1</u>
Samples received at <6 °C w/o freezing?	✓				Note: Not required for metals analysis.
Ice packs or ice present?	✓				The lack of ice or ice packs (i.e. no attempt to begin cooling process) may not meet certain regulatory requirements and may invalidate certain data.
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals analysis.
6. Volatiles free of headspace: <b>Aqueous:</b> No bubble larger than a pea <b>Soil/Sediment:</b> Received in airtight container?				✓	
Received in methanol?				✓	
Methanol covering soil?				✓	
7. Trip Blank present in cooler?				✓	
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2 Sulfide - >9 Cyanide – pH >12				✓	

\* Log-In Notes to Exceptions: document any problems with samples or discrepancies or pH adjustments

0000011

## Katahdin Analytical Services, Inc.

## Sample Receipt Condition Report

Client: <u>MacTec / Olin</u>	KAS PM: <u>AJC</u>	Sampled By: <u>Client</u>
Project:	KIMS Entry By: <u>DD</u>	Delivered By: <u>Client</u>
KAS Work Order#: <u>SC5415 / SC5416</u>	KIMS Review By: <u>PC</u>	Received By: <u>KR</u>
SDG #:	Cooler: <u>1</u> of <u>1</u>	Date/Time Rec.: <u>9-12-09 1000</u>

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?		✓			
2. Chain of Custody present in cooler?	✓				
3. Chain of Custody signed by client?	✓				
4. Chain of Custody matches samples?	✓				
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.	✓				Temp (°C): -0.6
Samples received at <6 °C w/o freezing?	✓				Note: Not required for metals analysis.
Ice packs or ice present?	✓				The lack of ice or ice packs (i.e. no attempt to begin cooling process) may not meet certain regulatory requirements and may invalidate certain data.
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals analysis.
6. Volatiles free of headspace: <b>Aqueous:</b> No bubble larger than a pea <b>Soil/Sediment:</b> Received in airtight container? Received in methanol? Methanol covering soil?				✓ ✓ ✓ ✓	
7. Trip Blank present in cooler?				✓	
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved? Metals, COD, NH <sub>3</sub> , TKN, O/G, phenol, TPO <sub>4</sub> , N+N, TOC, DRO, TPH – pH <2 Sulfide - >9 Cyanide – pH >12				✓ ✓ ✓	

\* Log-In Notes to Exceptions: document any problems with samples or discrepancies or pH adjustments

0000012

## Katahdin Analytical Services, Inc.

## Sample Receipt Condition Report

Client: Olin / mactec	KAS PM: AJC	Sampled By: Client
Project:	KIMS Entry By: DD	Delivered By: Client
KAS Work Order#: SC5605 /SC5606	KIMS Review By: dlc	Received By: DD
SDG #: SC5607	Cooler: 1 of 1	Date/Time Rec.: 9-19-09 11:11

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	✓				
2. Chain of Custody present in cooler?	✓				
3. Chain of Custody signed by client?	✓				
4. Chain of Custody matches samples?	✓				
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.	✓				Temp (°C): 0.8
Samples received at <6 °C w/o freezing?	✓				Note: Not required for metals analysis.
Ice packs or ice present?	✓				The lack of ice or ice packs (i.e. no attempt to begin cooling process) may not meet certain regulatory requirements and may invalidate certain data.
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?				✓	Note: No cooling process required for metals analysis.
6. Volatiles free of headspace: <b>Aqueous:</b> No bubble larger than a pea <b>Soil/Sediment:</b> Received in airtight container? Received in methanol? Methanol covering soil?	✓			✓	
7. Trip Blank present in cooler?		✓			
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2 Sulfide - >9 Cyanide – pH >12				✓	
				✓	
				✓	
				✓	

\* Log-In Notes to Exceptions: document any problems with samples or discrepancies or pH adjustments

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Katahdin - Soil

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Client: Olin Corporation		Client Project #:	6107090016	INVOICE INFO	
Address: 3855 North Ocoee St. Suite 200 Cleveland, TN 37312		Work Site ID:	Wilmington, MA	Company Name:	Olin Corp
		Reports Sent To:	Steve Morrow	Company Contact: ERG Accounts Payable	
		Phone:	423-336-4511	Fax:	423-336-1466
			Email:	SGMorrow@olin.com	Email Rpt:
		Requested Turnaround Time (SPECIFY)	Regulatory Programs:	MADDEP MCP	Superfund _____
		Standard _____	Rush _____	Report Requirements	Level IV Package _____
		(Lab Approval Required)		EDD Requirements:	MACTEC EQUIS EZ EDD _____
				Job #	Quote # _____
				Lab SDG #	PO # _____

MACTEC

Special Instructions For Lab

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- 1) Fraction T = Total, D = Dissolved, S = SPLP, C = TCLP, N = Not Applicable  
 2) QC Codes FS = Field Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike, MSD = Matrix Spike Duplicate, PE = Performance Evaluation Sample, FB = Field Blank  
 3) Sample Matrix GW = Groundwater, SW = Surface Water, DW = Drinking Water, SO = Soil, SD = Sediment, BW = Blank Water, NAL = Non-Aqueous Liquid, PR = Product, O = Oil  
 4.) Preservation Type: HA = Hydrochloric Acid, NI = Nitric Acid, SA = Sulfuric Acid, SH = Sodium Hydroxide, Zn = Zinc Acetate, ME = Methanol, DI = DI Water  
 5) Ionic Trace: C = Chloride, D = Dissolve, V = Volumetric, V = Volumetric, C = Chloride, AC = Ammonium Chloride, AV = Ammonium Vanadate, UVA = Urea, AATC = Ammonium Acetate, CTC = Citric Acid, TMA = Tetramethylammonium Chloride

Cooler? Y / N	MADEP Requirement Samples Icd? Y / N
Temp @ receipt:	Deg C
Preservation / pH checked? Y / N	
By: _____ Date: _____	

## MACTEC

Sample ID	Date/Time Collected	Fraction (1)		QC Code (2)		Sample Matrix (3)		Composite Matrix (3)		Total # of Contaminants		Cr+6 (3060A / 7199)		DMF (Mod 8033 - GC/NPD)		DMS (Mod 8033 - GC/NPD)		Opx / Kemperore (8000B - HPLC)		Perchlorate (685D)		Hydrazine, MMH, UDMH (Mod 8315 LC/MS/MS)		Hydrazine, MMH, UDMH (Mod 8315 LC/MS/MS)		Comments (Special Instructions)	
		T	FS	SO	G	1	X			X		X		X		X		X		Zn AV	-	-	<-Preservative Type (4)	<-Bottle Type (5)			
OC-SB-472-30/32-XXX	9/4/2009 8:50:00 AM	T	FS	SO	G	1	X			X		X		X		X		X		Zn AV	-	-					
OC-SB-472-8.0/10-XXX	9/4/2009 7:55:00 AM	T	FS	SO	G	1	X			X		X		X		X		X		Zn AV	-	-					

## Special Instructions For Lab

## Notes:

- 1 ) Fraction: T = Total, D = Dissolved, S = SPL, C = TCLP, N = Not Applicable  
 2 ) QC Codes: FS = Field Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike, MSD = Matrix Spike Duplicate, PE = Performance Evaluation Sample, FB = Field Blank  
 3 ) Sample Matrix: GW = Groundwater, SW = Surface Water, DW = Drinking Water, SO = Soil, SD = Sediment, BW = Blank Water, NAL = Non-Aqueous Liquid, PR = Product, O = Oil  
 4 ) Preservation Type: HA = Hydrochloric Acid, NI = Nitric Acid, SA = Sulfuric Acid, SH = Sodium Hydroxide, Zn = Zinc Acetate, ME = Methanol, DI = DI Water  
 5 ) Bottle Type: G = Glass, P = Plastic, V = 40mL VOA Glass Vial, AG = Amber Glass, AV = 40mL VOA Amber Glass Vial.

Cooler ? Y / N	MADEP Requirement Samples Iced? Y / N	Temp @ receipt: _____	Deg C
Temp: _____	Time: _____	Preservation / pH checked? Y / N	By: _____ Date: _____ Time: _____

Relinquished: Sept 4, 2009 Date: Sept 4, 2009 Received: Sept 4, 2009 Date: Sept 4, 2009 Time: 10:00

Relinquished: \_\_\_\_\_ Date: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ Time: \_\_\_\_\_ Received: \_\_\_\_\_ Date: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ Time: \_\_\_\_\_

## **Olin Wilmington OU1 Soil Sampling Categories**

There will be three categories of samples submitted to the laboratories during the soil sampling program based primarily on the depth of soil locations. These categories will be identified in notes provided with the chain of custody submitted with samples. The following categories are included:

### **Category 1**

Soil boring samples 0'-1': request that all samples are analyzed and reported in the normal project turnaround time (TAT).

### **Category 2**

Soil boring samples from the 1'-10' interval: All samples are analyzed. Rush TAT is requested on a subset of analyses as indicated below:

VOCs: rush 7-day TAT

SVOCs: NDMA, and phthalic anhydride: normal 30-day TAT

DMF: normal 21-day TAT

Hydrazine: rush 7 day TAT

Metals: normal 30-day TAT (except mercury)

Mercury: 10 day TAT

Hexavalent Chromium: 10 day TAT

Formaldehyde/acetaldehyde: normal TAT

Anions: normal TAT

Ammonia: normal TAT

### **Category 3**

Soil boring samples from >10 ft: Sample are held with analysis pending. For a subset of analyses the samples will be extracted and held by the lab pending instructions from MACTEC-Olin.

VOCs: hold pending results of Category 2

SVOCs: extract and hold pending results of Category 2

NDMA: extract and hold pending results of Category 2

DMF: extract and hold pending results of Category 2

Hydrazine: hold pending results of Category 2

Metals: hold pending results of Category 2

Mercury: hold pending results of Category 2

Hexavalent Chromium: hold pending results of Category 2

Phthalic anhydride: extract and hold pending results of Category 2

Formaldehyde/acetaldehyde: run normal TAT

Anions: run normal TAT

Ammonia: run normal TAT

For rush TAT samples the laboratory will provide preliminary results with a narrative and sample results summary report. The lab will also provide data on a preliminary data EDD. Final result and supporting data packages will be provided in the normal TAT for the project.

Page  
3 of 3  
0000016

SC5324  
SC5321

Katahdin - Sarl

Page 1 of 4

Client:	Olin Corporation	Client Project #:	6107090016	INVOICE INFO				Shaded Areas for office use only	
Address:	3855 North Ocoee St. Suite 200	Work Site ID:	Wilmington, MA	Company Name: Olin Corp					
Cleveland, TN 37312		Reports Sent To:	Steve Morrow	Company Contact: ERG Accounts Payable					
Phone:	423-336-4511	Fax:	423-336-1466	Email:	SGMorrow@olin.com	Email Rpt:	Address:	Same as Client	
Requested Turnaround Time (SPECIFY)	Rush _____ (Lab Approval Required)	Regulatory Programs:	MADEP MCP	Superfund	Level IV Package	Level III Package	Phone:	Email	
Standard		Report Requirements	EDD Requirements:	MACTEC EQUIS EZ EDD			Job #	Quote #	
					Lab SDG #		PO #		

MACTEC										Comments (Special Instructions)									
Sample ID	Date/Time Collected	Fraction (1)	QC Code (2)	Sample Matrix (3)	Total # of Containers	Cr+6 (7199)	DMF (Mod 8033 / 7199)	Opx / Kemperle (8000B - HPLC)	G P G V V V V	Zn AV AG	-	-	-	-	-	-	-	<-Preservative Type (4) <-Bottle Type (5)	
OC-SB-450-0.0/1.0-XXX	9/9/2009 1:40:00 PM	T FS	SO G	1 X															
																		Category 1	

### Special Instructions For Lab

#### Notes:

- 1.) Fraction T = Total, D = Dissolved, S = SPLP, C = TCLP, N = Not Applicable
- 2.) QC Codes: FS = Field Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike, MSD = Matrix Spike Duplicate, PE = Performance Evaluation Sample, FB = Field Blank.
- 3.) Sample Matrix: GW = Groundwater, SW = Surface Water, DW = Drinking Water, SO = Soil, SD = Sediment, BW = Blank Water, NA1 = Non-Aqueous Liquid, PR = Product, O = Oil
- 4.) Preservation Type: HA = Hydrochloric Acid, NI = Nitric Acid, SA = Sulfuric Acid, SH = Sodium Hydroxide, Zn = Zinc Acetate, ME = Methanol, DI = DI Water
- 5.) Bottle Type: G = Glass, P = Plastic, V = Plastic, V = 40mL VOA Glass Vial, AG = Amber Glass Vial, AV = 40mL VOA Amber Glass Vial.

Cooler? Y / N	MADEP Requirement
Samples Iced? Y / N	
Temp @ receipt: _____	Deg C
Preservation / pH checked? Y / N	
By: _____	Date: _____
Time: _____	By: _____

Relinquished: Stig Junes Date: 9/9/09 Time: 1800 Received: Dr. Dr. Date: 9/10/09 Time: 1000  
 Relinquished: \_\_\_\_\_ Date: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ Time: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ Received: \_\_\_\_\_ Date: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ Time: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

1 cooler w/ ice Fed Ex P1 tracking = 8372 - 3852 - 1813  
 00001

Kathodin-Sort

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IMACTEC

Special Instructions For Lab

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- 2) QC Codes FS = Field Sample TB = Trip Blank FD = Field Duplicate EB = Equipment Blank. MS = Matrix Spike. MSD = Matrix Spike Duplicate. PE = Performance Evaluation Sample. FB = Field Blank  
 3) Sample Matrix GW = Groundwater. SW = Surface Water. DW = Drinking Water SO = Soil. SD = Sediment. BW = Blank Water. NAL = Non-Aqueous Liquid. PR = Product. O = Oil  
 4) Preservation Type HA = Hydrochloric Acid. NI = Nitric Acid. SA = Sulfuric Acid. SH = Sodium Hydroxide. Zn = Zinc Acetate. ME = Methanol. DI = DI Water  
 5) Battlo Tunc C = Chloro D = Dinitro V = VCD VOA Chromat AC = Acetone Chromat AV = Acetone VOA A = Acetone VOA C = Acetone VOA V = VCD

Relinquished: <u>Jay Rose</u>	Date: <u>9/9/09</u>	Time: <u>1800</u>	Received: <u>Dr. Dry</u>	Date: <u>9/9/09</u>	Time: <u>1800</u>	Temp @ receipt: <u>44°</u>	Time: <u>1800</u>	Cooler? Y/N	MADEP Requirement Samples Iced? Y/N
Relinquished: _____	Date: _____ / _____ / _____	Time: _____	Received: _____	Date: _____ / _____ / _____	Time: _____	Preservation / pH checked? Y/N	Time: _____	Deg C	By: _____ Date: _____

# Kataholin - Water

Page 3 of 4

Client:	Olin Corporation	Client Project #:	61070900016	INVOICE INFO		Shaded Areas for office use only	
Address:	3855 North Ocoee St. Suite 200	Work Site ID:	Wilmington, MA	Company Name:		Olin Corp	
	Cleveland, TN 37312	Reports Sent To:	Steve Morrow	Company Contact:		ERG Accounts Payable	
Phone:	423-336-4511	Fax:	423-336-1466	Email:	SGMorrow@olin.com	Email Rpt:	Same as Client
Requested Turnaround Time SPECIFY	Rush _____ (Lab Approval Required)	Regulatory Programs:	MADEP MCP Superfund	Report Requirements	Level IV Package	Level II Package	Phone:
		EDD Requirements:	MACTEC EQUIS EZ EDD				Email

MACTEC								Comments (Special Instructions)								<--Preservative Type (4)	
Sample ID	Date/Time Collected	Fraction (1)	QC Code (2)	Sample Matrix (3)	Total # of Containers	Composite Matrix (4)	or Grab (5)	DMF (Mod 8033 - GC/NPD)	DMF (Mod 8060A / 7199)	Cr+6 (3060A / 7199)	Cr+6 (7199)	Opx / Kemperate (8000B - HPLC)	Perchlorate (6850)	Hydrazine, MMH, UDMH (Mod 8315 LC/MS/MS)	Zn AV	<--Bottle Type (5)	
CC-EBK-008	9/8/2009 11:00:00	T	EB	BW	G	2	X										

## Special Instructions For Lab

### Notes:

- 1.) Fraction T = Total. D = Dissolved. S = SPLP. C = TCLP. N = Not Applicable
- 2.) QC Codes: F = Field Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike, MSD = Matrix Spike Duplicate, PE = Performance Evaluation Sample, FB = Field Blank
- 3.) Sample Matrix: GW = Groundwater, SW = Surface Water, DW = Drinking Water, SO = Soil, SD = Sediment, BW = Blank Water, NAL = Non-Aqueous Liquid, PR = Product, O = Oil
- 4.) Preservation Type: HA = Hydrochloric Acid, NI = Nitric Acid, SA = Sulfuric Acid, SH = Sodium Hydroxide, Zn = Zinc Acetate, ME = Methanol, DI = DI Water
- 5.) Bottle Type: G = Glass, P = Plastic, V = Plastic, V = 40mL VOA Glass Vial, AG = Amber Glass Vial, AV = 40mL VOA Amber Glass Vial.

Relinquished: <u>Chris Lues</u>	Date: <u>9/9/09</u>	Time: <u>1800</u>	Received: <u>Dr. Dr. Dr.</u>	Date: <u>9/10/09</u>	Time: <u>1000</u>	By: <u>DR. DR. DR.</u>
Relinquished: _____	Date: _____	Time: _____	Received: _____	Date: _____	Time: _____	By: _____
				Cooler? Y / N	MADEP Requirement	
				Samples Iced? Y / N	Temp @ receipt: _____ Deg C	
					Preservation / pH checked? Y / N	

## **Olin Wilmington OU1 Soil Sampling Categories**

There will be three categories of samples submitted to the laboratories during the soil sampling program based primarily on the depth of soil locations. These categories will be identified in notes provided with the chain of custody submitted with samples. The following categories are included:

### **Category 1**

Soil boring samples 0'-1': request that all samples are analyzed and reported in the normal project turnaround time (TAT).

### **Category 2**

Soil boring samples from the 1'-10' interval: All samples are analyzed. Rush TAT is requested on a subset of analyses as indicated below:

VOCs: rush 7-day TAT  
SVOCs: NDMA, and phthalic anhydride: normal 30-day TAT  
DMF: normal 21-day TAT  
Hydrazine: rush 7 day TAT  
Metals: normal 30-day TAT (except mercury)  
Mercury: 10 day TAT  
Hexavalent Chromium: 10 day TAT  
Formaldehyde/acetaldehyde: normal TAT  
Anions: normal TAT  
Ammonia: normal TAT

### **Category 3**

Soil boring samples from >10 ft: Sample are held with analysis pending. For a subset of analyses the samples will be extracted and held by the lab pending instructions from MACTEC-Olin.

VOCs: hold pending results of Category 2  
SVOCs: extract and hold pending results of Category 2  
NDMA: extract and hold pending results of Category 2  
DMF: extract and hold pending results of Category 2  
Hydrazine: hold pending results of Category 2  
Metals: hold pending results of Category 2  
Mercury: hold pending results of Category 2  
Hexavalent Chromium: hold pending results of Category 2  
Phthalic anhydride: extract and hold pending results of Category 2  
Formaldehyde/acetaldehyde: run normal TAT  
Anions: run normal TAT  
Ammonia: run normal TAT

For rush TAT samples the laboratory will provide preliminary results with a narrative and sample results summary report. The lab will also provide data on a preliminary data EDD. Final result and supporting data packages will be provided in the normal TAT for the project.

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Katahdin - Soil

SC 5415

Client: Olin Corporation		Client Project #:	6107090016	INVOICE INFO		Shaded Areas for office use only	
Address:	3855 North Ocoee St. Suite 200 Cleveland, TN 37312	Work Site ID:	Wilmington, MA	Company Name:	Olin Corp		
		Reports Sent To:	Steve Morrow	Company Contact:	ERG Accounts Payable		
Phone:	423-336-4511	Fax:	423-336-1466	Email:	SGMorrow@olin.com	Email Rpt:	Address:
Requested Turnaround Time (SPECIFY)		Regulatory Programs:	MADEP MCP	Superfund		Same as Client	Email
Standard	Rush	Report Requirements	Level IV Package	Level II Package		Phone:	
	(Lab Approval Required)	EDD Requirements:	MACTEC EQUIS EZ EDD		Job #	Lab SDG #	Quote # PO #

## **Special Instructions For Lab**

14

- 1 ) Fraction: T = Total; D = Dissolved; S = SPLP; C = TCLP; N = Not Applicable  
 2 ) QC Codes FS = Field Sample; TB = Trip Blank; FD = Field Duplicate; EB = Equipment Blank; MS = Matrix Spike; MSD = Matrix Spike Duplicate; PE = Performance Evaluation Sample; FB = Field Blank  
 3 ) Sample Matrix: GW = Groundwater; SW = Surface Water; DW = Drinking Water; SO = Soil; SD = Sediment; BW = Blank Water; NAL = Non-Aqueous Liquid; PR = Product; O = Oil  
 4 ) Preservation Type: HA = Hydrochloric Acid; NI = Nitric Acid; SA = Sulfuric Acid; SH = Sodium Hydroxide; Zn = Zinc Acetate; ME = Methanol; DI = DI Water  
 5 ) Radio-Tracer: C = Cesium-137; Pb = Lead-210; V = Vanadium-51; Cr = Chromium-51; U = Uranium-235

Relinquished:	<u>09/12/09</u>	Date:	<u>09/12/09</u>	Time:	<u>020</u>	Received:	<u>09/12/09</u>	Date:	<u>09/12/09</u>	Time:	<u>020</u>	Temp @ receipt:	<u>11.5°C</u>	Time:	<u>020</u>	Preservation / pH checked?	<u>Y/N</u>
Relinquished:	<u>Tr</u>	Date:	<u>09/12/09</u>	Time:	<u>020</u>	Received:	<u>09/12/09</u>	Date:	<u>09/12/09</u>	Time:	<u>020</u>	Temp @ receipt:	<u>11.5°C</u>	Time:	<u>020</u>	Samples Iced?	<u>Y/N</u>
Relinquished:	<u>Tr</u>	Date:	<u>09/12/09</u>	Time:	<u>020</u>	Received:	<u>09/12/09</u>	Date:	<u>09/12/09</u>	Time:	<u>020</u>	Temp @ receipt:	<u>11.5°C</u>	Time:	<u>020</u>	Deg C	<u>By: _____ Date: _____</u>

Katalin - Sot

S55416  
S55415

Page 2 of 4

MACTEC		Date/Time Collected	Fraction (1)	QC Code (2)	Sample Matrix (3)	Composile Matrix (3)	Total # of Containers	Cr+6 (3060A / 7199)	DMF (Mod 8033 - GC/NPD)	Opx / Kemperle (8000B - HPLC)	Perchlorate (6850)	Hydrazine, MH, UDMH (Mod 8315 LC/MS/MS)	Hydrazine, MH, UDMH (Mod 8315 LC/MS/MS)	Comments (Special Instructions)
OC-SB-434-0/1.0-XXX		9/10/2009 7:50:00 AM	T	FS	SO	G	1	X						<-Preservative Type (4) <-Bottle Type (5)
OC-SB-434-15/16-XXX		9/10/2009 9:35:00 AM	T	FS	SO	G	1	X						Category 3
OC-SB-434-7/0/9.0-XXX		9/10/2009 8:15:00 AM	T	FS	SO	G	1	X						Category 2
OC-SB-456-0/0/1.0-XXX		9/11/2009 8:30:00 AM	T	FS	SO	G	1	X						Category 1
OC-SB-456-16/18-XXX		9/11/2009 10:40:00	T	FS	SO	G	1	X						Category 1
OC-SB-456-7/0/9.0-DUP		9/11/2009 9:00:00 AM	T	FD	SO	G	1	X						Category 1
OC-SB-456-7/0/9.0-MSD		9/11/2009 9:00:00 AM	T	M	SO	G	1	X						Category 1
				S										

### Special Instructions For Lab

Notes:

- 1 ) Fraction: T = Total D = Dissolved S = SP/LP C = TCLP N = Not Applicable
- 2 ) QC Codes FS = Field Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike, MSD = Matrix Spike Duplicate, PE = Performance Evaluation Sample, FB = Field Blank
- 3 ) Sample Matrix: GW = Groundwater SW = Surface Water DW = Drinking Water SO = Soil SD = Sediment, BW = Blank Water, NAL = Non-Aqueous Liquid PR = Product, O = Oil
- 4 ) Preservation Type: HA = Hydrochloric Acid NI = Nitric Acid SA = Sulfuric Acid SH = Sodium Hydroxide Zn = Zinc Acetate ME = Methanol DI = Di Water
- 5 ) Bottle Type: G = Glass, P = Plastic, V = Plastic, AG = Amber Glass Vial, AV = 40mL VOA Amber Glass Vial.

Cooler ? Y / N	MADEP Requirement
Samples Iced? Y / N	
Temp @ receipt: _____	Deg C
Preservation / pH Checked? Y / N	
By: _____	Date: _____ / _____ / _____ Time: _____

Relinquished: Jay Lee Date: 09/12/09 Time: 00:00 Received: 10:00 Date: 09/12/09 Time: 00:00

Relinquished: \_\_\_\_\_ Date: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ Time: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ Received: \_\_\_\_\_ Date: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ Time: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

S2375  
S5414**Katahdin - Soil**

Page 3 of 4

**MACTEC**

Sample ID	Date/Time Collected	Fraction (1)	QC Code (2)	Sample Matrix (3)	Composite Matrix (3) or Grab (G)	Total # of Containers	Cr+6 (3060A / 7199)	DMF (Mod 8033 - GC/NPD)	DMF (Mod 8033 - GC/NPD)	Opx / Kemper (8000B - HPLC)	Perchlorate (6850D)	Hydrazine, MMH, UDMH (Mod 8315 LC/MS/MS)	Hydrazine, MMH, UDMH (Mod 8315 LC/MS/MS)	AG	AV	Zn	-	<--Preservative Type (4)	
																		Comments (Special Instructions)	
OC-SB-456-7 0/9.0-XMS	9/11/2009 9:00:00 AM	T M SO S	1	X														Category 1	
OC-SB-456-7 0/9.0-XXX	9/11/2009 9:00:00 AM	T FS SO G	1	X														Category 1	
OC-SB-457-0/1.0-XXX	9/11/2009 1:10:00 PM	T FS SO G	1	X														Category 1	
OC-SB-457-8 0/10-XXX	9/11/2009 1:20:00 PM	T FS SO G	1	X														Category 1	

**Special Instructions For Lab**

## Notes:

- 1 ) Fraction T = Total; D = Dissolved, S = SPLP, C = TCLP, N = Not Applicable
- 2 ) QC Codes FS = Field Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike, MSD = Matrix Spike Duplicate, PE = Performance Evaluation Sample, FB = Field Blank
- 3.) Sample Matrix: GW = Groundwater, SW = Surface Water, DW = Drinking Water, SO = Soil, SD = Sediment, BW = Blank Water, NAL = Non-Aqueous Liquid, PR = Product, O = Oil
- 4.) Preservation Type: HA = Hydrochloric Acid, NI = Nitric Acid, SA = Sulfuric Acid, SH = Sodium Hydroxide, ZN = Zinc Acetate, ME = Methanol, DI = DI Water
- 5.) Bottle Type: G = Glass, P = Plastic, V = Plastic, AG = Amber Glass Vial, AV = 40mL VOA Amber Glass Vial.

Cooler ? Y / N	MADEP Requirement
Samples Iced? Y / N	
Temp @ receipt: _____	Deg C
Preservation / pH checked? Y / N	
By: _____	Date: _____
Time: _____	Time: _____

*Stig*  
Relinquished: 09/12/09 Date: 09/10/09 Time: 10:00  
Received: 09/10/09 Date: 09/10/09 Time: 10:00

Relinquished: \_\_\_\_\_ Date: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ Time: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

000023

## **Olin Wilmington OU1 Soil Sampling Categories**

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Soil boring samples 0'-1': request that all samples are analyzed and reported in the normal project turnaround time (TAT).

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Soil boring samples from the 1'-10' interval: All samples are analyzed. Rush TAT is requested on a subset of analyses as indicated below:

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SVOCs: NDMA, and phthalic anhydride: normal 30-day TAT

DMF: normal 21-day TAT

Hydrazine: rush 7 day TAT

Metals: normal 30-day TAT (except mercury)

Mercury: 10 day TAT

Hexavalent Chromium: 10 day TAT

Formaldehyde/acetaldehyde: normal TAT

Anions: normal TAT

Ammonia: normal TAT

### **Category 3**

Soil boring samples from >10 ft: Sample are held with analysis pending. For a subset of analyses the samples will be extracted and held by the lab pending instructions from MACTEC-Olin.

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SVOCs: extract and hold pending results of Category 2

NDMA: extract and hold pending results of Category 2

DMF: extract and hold pending results of Category 2

Hydrazine: hold pending results of Category 2

Metals: hold pending results of Category 2

Mercury: hold pending results of Category 2

Hexavalent Chromium: hold pending results of Category 2

Phthalic anhydride: extract and hold pending results of Category 2

Formaldehyde/acetaldehyde: run normal TAT

Anions: run normal TAT

Ammonia: run normal TAT

For rush TAT samples the laboratory will provide preliminary results with a narrative and sample results summary report. The lab will also provide data on a preliminary data EDD. Final result and supporting data packages will be provided in the normal TAT for the project.

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0000024

SCS404  
SCS407

Katalin - Sci 1

Page 1 of 8

Client:	Olin Corporation	Client Project #:	6107090016	INVOICE INFO	
Address:	3855 North Ocoee St. Suite 200	Work Site ID:	Wilmington, MA	Company Name:	Olin Corp
		Reports Sent To:	Steve Morrow	Shaded Areas for office use only	
Phone:	423-336-4511	Fax:	423-336-1466	Email:	SGMorrow@olin.com
Regulatory Programs:	MADEP MCP	Superfund		Company Contact:	ERG Accounts Payable
Report Requirements:	Level IV Package	Level III Package		Address:	Same as Client
EDD Requirements:	MACTEC EQUIS EZ EDD			Phone:	Email:
Requested Turnaround Time (Specify):	Rush _____	Standard _____		Job #	Quote #
(Lab Approval Required)				Lab SDG #	PO #

**MACTEC**

Sample ID	Date/Time Collected	Fraction (1)	QC Code (2)	Sample Matrix (3)	Composite Matrix (3)	Total # of Containers	DMF (Mod 8033 - GC/NPD)	Opx / Kemperre (8000B - HPLC)	Perchlorate (6850)	Hydrazine, MMH, UDMH (Mod 8315 LC/MS/MS)	Hydrazine, MMH, UDMH (Mod 8315 LC/MS/MS)	Zn	AV	<--Preservative Type (4)			
														AG	AV	<--Bottle Type (5)	
OC-SB-413-C-011.0-XXX	9/17/2009 11:10:00																

Comments (Special Instructions)												Category 1	

### Special Instructions For Lab

Notes:

- 1.) Fraction T = Total D = Dissolved S = SP/L C = TCLP N = Not Applicable
- 2.) QC Codes F/S = Field Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike, MSD = Matrix Spike Duplicate, PE = Performance Evaluation Sample, FB = Field Blank
- 3.) Sample Matrix GW = Groundwater SW = Surface Water DW = Drinking Water SO = Soil SD = Sediment BW = Blank Water NAL = Non-Aqueous Liquid PR = Product O = Oil
- 4.) Preservation Type HA = Hydrochloric Acid NI = Nitric Acid SA = Sulfuric Acid SH = Sodium Hydroxide Zn = Zinc Acetate ME = Methanol DI = Di Water
- 5.) Bottle Type G = Glass, P = Plastic, V = Plastic, AV = Amber Glass Vial AG = VOA Glass Vial

Cooler? Y / N	MADEP Requirement
Samples Iced? Y / N	
Temp @ receipt: _____	Deg C
Preservation / pH checked? Y / N	
By _____ Date: _____ / _____ / _____ Time: _____	

*Dr. Dr. Dr.*  
Date: 9/19/09 Time: 1111 Received: 9/19/09

Cooler? Y / N	MADEP Requirement
Samples Iced? Y / N	
Temp @ receipt: _____	Deg C
Preservation / pH checked? Y / N	
By _____ Date: _____ / _____ / _____ Time: _____	

*Retinished: 9/19/09*  
Date: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ Time: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ Received: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

MACTEC		Sample ID		Date Sample Collected		Fraction (1)		QC Codes (2)		Sample Matrix (3)		Total # of Contaminants		Q/H (3060A, 7199)		DMF (Mod 8033 - GC/NPD)		Pesticide (6850)		Yield azine, MH, UDMH (Mod 8315 LC/MS/MS)		Yield azine, MH, UDMH (Mod 8315 LC/MS/MS)		Comments (Special Instructions)	
G	P	G	V	-	-	-	-	-	-	AG	Zn	-	-	-	-	-	-	-	-	-	<--Preservative Type (4)	<--Bottle Type (5)			
G	P	G	V	-	-	-	-	-	-	AV	-	-	-	-	-	-	-	-	-	-					
G	P	G	V	-	-	-	-	-	-	AG	-	-	-	-	-	-	-	-	-	-					
G	P	G	V	-	-	-	-	-	-	AV	-	-	-	-	-	-	-	-	-	-					

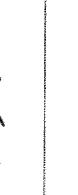
OC-SB-413-10/5-0-XXX	9/17/2009	T	FS	SO	G	1	X																	
OC-SB-435-0/1/0-XXX	9/17/2009	T	FS	SO	G	1	X																	
OC-SB-435-1/15-XXX	9/17/2009	T	FS	SO	G	1	X																	
OC-SB-435-6/0/10-XXX	9/17/2009	T	FS	SO	G	1	X																	
OC-SB-453-0/1/0-XXX	9/17/2009	T	FS	SO	G	1	X																	
OC-SB-453-1/0/6-XXX	9/17/2009	T	FS	SO	G	1	X																	

### Special Instructions For Lab

#### Notes:

- 1 ) Fraction T = Total D = Dissolved, S = SP/L C = TCLP N = Not Applicable
- 2 ) QC Codes: FS = Field Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike, MSD = Matrix Spike Duplicate, PE = Performance Evaluation Sample, FB = Field Blank
- 3 ) Sample Matrix: GW = Groundwater SW = Surface Water DW = Drinking Water SO = Soil SD = Sediment BW = Blank Water, NAL = Non-Aqueous Liquid PR = Product, O = Oil
- 4 ) Preservation Type: HA = Hydrochloric Acid NI = Nitric Acid SA = Sulfuric Acid SH = Sodium Hydroxide Zn = Zinc Acetate ME = Methanol DI = DI Water
- 5 ) Bottle Type: G = Glass P = Plastic V = Plastic V = 40ml VOA Glass Vial AG = Amber Glass AV = 40ml VOA Amber Glass Vial

Cooler? Y / N	MADEP Requirement
Samples Iced? Y / N	
Temp @ receipt: _____	Deg C
Preservation / pH Checked? Y / N	
Date: _____ / _____ / _____	Time: _____
Date: _____ / _____ / _____	Time: _____
Date: _____ / _____ / _____	Time: _____
Date: _____ / _____ / _____	Time: _____

  
 Dr. John Date: 9/19/09 Time: 11:11 Received: 9/19/09  
 Relinquished: \_\_\_\_\_ Date: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ Time: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
  
 Dr. John Date: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ Time: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
 Relinquished: \_\_\_\_\_ Date: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ Time: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
 00026

Katalin - Soil

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# MACTEC

Sample ID	Date/Time Collected	Site/Location	QC Codes (2)	Sample Matrix (3)	Total # of Contaminants	QA/QC (7199)	DMP Mod 8033 - GC/NPD)	Odes / Keenope (8000B - HPLC)	Precipitate (6850)	Hyd azine, MTH, UDMH (MDA, 8315 LC/MS/MS)	Hyd azine, MTH, UDMH (MDA, 8315 LC/MS/MS)	Comments (Special Instructions)
OC-SE-457-28/30-XXX	9/14/2009 11:30:00	T	FS ISO G	1	X							Category 1
OC-SB-473-0/1.0-XXX	9/18/2009 9:40:00 AM	T	FS SO G	1	X							Category 1
OC-SB-473-13/15-XXX	9/18/2009 9:20:00 AM	T	FS SO G	1	X							Category 3
OC-SB-473-4/0/6.0-XXX	9/18/2009 9:05:00 AM	T	FS ISO G	1	X							Category 2
OC-SS-420-0/0/1.0-XXX	9/15/2009 3:25:00 PM	T	FS ISO G	1	X							Category 1
OC-SS-422-0/0/1.0-XXX	9/15/2009 4:30:00 PM	T	FS SO G	1	X							Category 1
OC-SS-424-0/0/1.0-XXX	9/15/2009 5:20:00 PM	T	FS SO G	1	X							Category 1

## Notes

1 ) Fraction T = Total, D = Dissolved, S = SP/LP, C = TCLP, N = Not Applicable

2 ) QC Codes FS = Field Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike, MSD = Matrix Spike Duplicate, PE = Performance Evaluation Sample, FB = Field Blank

3 ) Sample Matrix GW = Groundwater, SW = Surface Water, DW = Drinking Water, SO = Soil, SD = Sediment, BW = Blank Water, NAL = Non-Aqueous Liquid, PR = Product, O = Oil

4 ) Preservation Type HA = Hydrochloric Acid, NI = Nitric Acid, SA = Sulfuric Acid, SH = Sodium Hydroxide, ZN = Zinc Acetate, ME = Methanol, DI = DI Water

5 ) Bottle Type G = Glass, P = Plastic, V = 40mL VOA Glass Vial, AG = Amber Glass Vial, AV = 40mL VOA Amber Glass Vial

## Special Instructions For Lab

Cooler? Y / N	MADEF Requirement
Samples Iced? Y / N	
Temp @ receipt: _____ Deg C	

Retain/Released: <u>High</u>	Date: <u>9/19/09</u>	Time: <u>11:11</u>	Received: <u>DR DR</u>	Date: <u>/ /</u>	Time: <u>/ /</u>	Received: <u>DR DR</u>

000027

Katahdin -So: J

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# MACTEC

Sample ID	Date Time Collected	Preliminary Test Results				Category	Comments (Special Instructions)
		Zn	AV	AG	<-Preservative Type (4)		
OC-SS-427-0-01-0-XXX	9/16/2009 9:40:00 AM	T	FS	SO	1	X	
OC-SS-428-0-01-0-XXX	9/16/2009 10:25:00	T	FS	SO	1	X	
OC-SS-431-0-01-0-XXX	9/16/2009 11:35:00	T	FS	SO	1	X	
OC-SS-434-0-01-0-XXX	9/16/2009 4:15:00 PM	T	FS	SO	1	X	
OC-SS-440-0-01-0-XXX	9/16/2009 1:45:00 PM	T	FS	SO	1	X	
OC-SS-450-0-01-0-XXX	9/16/2009 3:55:00 PM	T	FS	SO	1	X	
OC-SS-453-0-01-0-XXX	9/17/2009 5:40:00 PM	T	FS	SO	1	X	

## Special Instructions For Lab

Notes:	
1.) Fraction T = Total. D = Dissolved. S = SPLP. C = TCLP. N = Not Applicable	
2.) QC Codes FS = Field Sample. TB = Trip Blank. FD = Field Duplicate. EB = Equipment Blank. MS = Matrix Spike. MSD = Matrix Spike Duplicate. PE = Performance Evaluation Sample. FB = Field Blank	
3.) Sample Matrix GW = Groundwater. SW = Surface Water. DW = Drinking Water. BW = Blank Water. NAL = NonAqueous Liquid. PR = Product. O = Oil	
4.) Preservation Type FA = Hydrochloric Acid. NI = Nitric Acid. SA = Sulfuric Acid. SH = Sodium Hydroxide. Zn = Zinc Acetate. ME = Methanol. DI = DI Water	
5.) Bottle Type G = Glass. P = Plastic. V = 40ml. VOA Glass Vial. AG = Amber Glass AV = 40ml. VOA Amber Glass Vial.	

Cooler? Y / N	MADER Requirement
Samples Iced? Y / N	Deg C
Preservation / pH checked? Y / N	Date: _____ / _____ / _____ Time: _____

*Dr. Dr*  
Beltinquishter: *Ch. J.* Date: 9/19/09 Time: 11:11 Received: 9/19/09  
Beltinquishter: *Ch. J.* Date: / / Time: / / Received: / /

000028

Katahdin - Soi

Page 5 of 8

Sample ID	Date Collected	Fraction		QC Codes (2)	Co-Pesticide (C) or Grub (G)	Total # of Contaminants	CHP (13060A / 7199)	DMT (Mod 8033 - GC/NPD)	DDE (Mod 8033 - GC/NPD)	Ode / Kenpere (3000B - HPLC)	Perchlorate (6850)	Hg azine, MINI UDMH (MS: 8315 LC/MS/MS)	Zn AV	AG	<-Preservative Type (4)		Comments (Special Instructions)					
		FS	SO															Category 1	Category 1	Category 1	Category 1	
OC-SS-456-0/1.0-XXX	9/16/2009 5:50:00 PM	FS	SO	G	T	X													Category 1	Category 1	Category 1	Category 1
OC-SS-456-0/1.0-XXX	9/18/2009 1:20:00 PM	FS	SO	G	T	X													Category 1	Category 1	Category 1	Category 1
OC-SS-457-0/1.0-XXX	9/17/2009 5:55:00 PM	FS	SO	G	T	X													Category 1	Category 1	Category 1	Category 1
OC-SS-458-0/1.0-XXX	9/18/2009 1:45:00 PM	FS	SO	G	T	X													Category 1	Category 1	Category 1	Category 1
OC-SS-460-0/1.0-XXX	9/16/2009 5:30:00 PM	FS	SO	G	T	X													Category 1	Category 1	Category 1	Category 1

### Special Instructions For Lab

#### Notes.

- 1 ) Fraction T = Total, D = Dissolved, S = SPUP, C = TCLP, N = Not Applicable
- 2 ) QC Codes FS = Field Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike, MSD = Matrix Spike Duplicate, PE = Performance Evaluation Sample, FB = Field Blank
- 3 ) Sample Matrix: GW = Groundwater, SW = Surface Water, DW = Drinking Water, SO = Sediment, SD = Sediment, BW = Blank Water, NAU = Non-Aqueous Liquid, PR = Product, O = Oil
- 4 ) Preservation Type: HA = Hydrochloric Acid, Ni = Nitric Acid, SA = Sulfuric Acid, SH = Zinc Acetate, Zn = Zinc Hydroxide, ME = Methanol, DJ = DI Water
- 5 ) Bottle Type: G = Glass, P = Plastic, V = Plastic Vial, AG = Amber Glass Vial, AV = 40mL VOA Amber Glass Vial

Cooler ? Y / N	MADEP Requirement Samples Iced? Y / N
Temp @ receipt: _____	Deg C
Date: 9/19/09	Time: 11:11
Preservation / pH checked? Y / N	By: _____
Date: / /	Time: / /
Received: Dr. Dr. / /	By: _____
Date: / /	Time: / /

Relinquished: Dr. Dr. Date: 9/19/09 Time: 11/11 Received: Dr. Dr. Date: 9/19/09 Time: 11:11 Preserved / pH checked? Y / N By: \_\_\_\_\_ Date: / / Time: / / Received: Dr. Dr. Date: / / Time: / /

Relinquished: Dr. Dr. Date: / / Time: / /

000029

# Katahdin - Water

Page 6 of 8

Client:	Olin Corporation	Client Project #:	6107090016	INVOICE INFO		Shaded Areas for office use only	
Address:	3855 North Ocoee St. Suite 200	Work Site ID:	Wilmington, MA	Company Name:		Olin Corp	
		Reports Sent To:		Steve Morrow			
Phone:	423-336-4511	Fax:	423-336-1466	Email:	SGMorrow@olin.com	Email Rot:	Same as Client
Requested Turnaround Time (SPECIFY)	Rush _____	Regulatory Programs:	MADEP MCP	Superfund	Level II Package	Level IV Package	Address:
Standard	(Lab Approval Required)	Report Requirements	EDD Requirements:	MACTEC EQUIS EZ EDD	Job #	Quote #	Phone:
				Lab SDG #	PO #		Email:

MACTEC										Comments (Special Instructions)											
		Fraction (1)		QC Code (2)		Sample Matrix (3)		Total # of Containers		DMF (Mod 8033 - GC/NPD)		Dex / Kemperate (8000B - HPLC)		Hydrazine, MMH, UDMH (Mod 8315 LC/MS/MS)		Hydrazine, MMH, UDMH (Mod 8315 LC/MS/MS)		Zn AV		<-Preservative Type (4) <-Bottle Type (5)	
Sample ID		Date/Time Collected		QC Codes		EB		BW		G		2		X		-		-		-	
OC-EBK-011		9/16/2009	8:35:00 AM	T		-		-		-		-		-		-		-			
Category 1																					

## Special Instructions For Lab

### Notes:

- 1.) Fraction: T = Total, D = Dissolved, S = SPL, C = TCLP, N = Not Applicable
- 2.) QC Codes: FS = Field Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike, MSD = Matrix Spike Duplicate, PE = Performance Evaluation Sample, FB = Field Blank
- 3.) Sample Matrix: GW = Groundwater, SW = Surface Water, DW = Drinking Water, SO = Soil, SD = Sediment, BW = Blank Water, NAL = Non-Aqueous Liquid, PR = Product, O = Oil
- 4.) Preservation Type: HA = Hydrochloric Acid, NI = Nitric Acid, SA = Sulfuric Acid, SH = Sodium Hydroxide, Zn = Zinc Acetate, ME = Methanol, DI = DI Water
- 5.) Bottle Type: G = Glass, P = Plastic, V = Plastic, AG = Amber Glass Vial, AV = 40mL VOA Amber Glass Vial.

Cooler? Y / N	MADEP Requirement
Samples Iced? Y / N	
Temp @ receipt: _____	Time: _____
Preservation / pH Checked? Y / N	
By: _____	Date: _____
Time: _____	Date: _____

*Dr. D. J. Reinhart*  
Date: 9/19/09 Received: 11/11/09  
Date: 9/19/09 Time: 11:11

Relinquished: Dr. D. J. Reinhart Date: 9/19/09 Received: 11/11/09  
Date: 9/19/09 Time: 11:11

Relinquished: Dr. D. J. Reinhart Date: 9/19/09 Received: 11/11/09  
Date: 9/19/09 Time: 11:11

Client:	Olin Corporation	Client Project #:	6107090016	Work Site ID:	Wilmington, MA	INVOICE INFO		Shaded Areas for office use only
Address:	3855 North Ocoee St. Suite 200	Report Sent To:	Steve Morrow	Company Name:	Olin Corp			
				Company Contact:	ERG Accounts Payable			
Phone:	423-336-4511	Fax:	423-336-1466	Email:	SGMorrow@olin.com	Email Rpt:		
Requested Turnaround Time (SPECIFY)	Rush _____	Regulatory Programs:	MADEP MCP Superfund	Address:	Same as Client			
Standard _____	(Lab Approval Required)	Report Requirements	Level IV Package	Phone:	Email			
EDD Requirements:	MACTEC EQUIS EZ EDD	Job #	Level II Package		Quote #			
		Lab SDG #			PO #			

MACTEC		Fraction (1)		QC Code (2)		Sample Matrix (3)		Total # of Contaminants		DMF (Mod 8033 - GC/NPD)		Opx / Kemperate (8000B - HPLC)		Hydrazine, MMH, UDMH (Mod 8315LC/MS/MS)		Hydrazine, MMH, UDMH (Mod 8315LC/MS/MS)		Zn		<-Preservative Type (4)		
Sample ID	Date/Time Collected	T	EB	BW	G	2		X										AG	AV			<-Bottle Type (5)
OC-EBK-012	9/17/2009 5:15:00 PM																					

### Special Instructions For Lab

#### Notes:

- 1.) Fraction T = Total; D = Dissolved; S = SPLP; C = TCLP; N = Not Applicable
- 2.) QC Codes FS = Field Sample, TB = Trip Blank, FD = Field Duplicate, EB = Equipment Blank, MS = Matrix Spike, MSD = Matrix Spike Duplicate, PE = Performance Evaluation Sample, FB = Field Blank
- 3.) Sample Matrix GW = Groundwater SW = Surface Water DW = Drinking Water SO = Soil SD = Sediment BW = Blank Water, NAL = Non-Aqueous Liquid PR = Product O = Oil
- 4.) Preservation Type HA = Hydrochloric Acid, NI = Nitric Acid, SA = Sulfuric Acid, SH = Zinc Acetate, ME = Methanol, DI = DI Water
- 5.) Bottle Type G = Glass P = Plastic, V = Plastic, VOA Glass Vial AG = Amber Glass Vial, AV = 40ml VOA Amber Glass Vial.

Cooler? Y / N	MADEP Requirement
Samples Iced? Y / N	
Temp @ receipt: _____	Deg C
Preservation / pH checked? Y / N	
Date: _____ / _____ / _____	Time: _____
Date: _____ / _____ / _____	Time: _____
Date: _____ / _____ / _____	Time: _____
Date: _____ / _____ / _____	Time: _____

*Jig 1003*

Relinquished: Dr. D Date: 9/19/09 Time: 11:11 Received: Dr. D Date: 9/19/09 Time: 11:11

Relinquished: Dr. D Date: 9/19/09 Time: / / Received: Dr. D Date: / / Time: / /

## **Olin Wilmington OU1 Soil Sampling Categories**

There will be three categories of samples submitted to the laboratories during the soil sampling program based primarily on the depth of soil locations. These categories will be identified in notes provided with the chain of custody submitted with samples. The following categories are included:

### **Category 1**

Soil boring samples 0'-1': request that all samples are analyzed and reported in the normal project turnaround time (TAT).

### **Category 2**

Soil boring samples from the 1'-10' interval: All samples are analyzed. Rush TAT is requested on a subset of analyses as indicated below:

VOCs: rush 7-day TAT  
SVOCs: NDMA, and phthalic anhydride: normal 30-day TAT  
DMF: normal 21-day TAT  
Hydrazine: rush 7 day TAT  
Metals: normal 30-day TAT (except mercury)  
Mercury: 10 day TAT  
Hexavalent Chromium: 10 day TAT  
Formaldehyde/acetaldehyde: normal TAT  
Anions: normal TAT  
Ammonia: normal TAT

### **Category 3**

Soil boring samples from >10 ft: Sample are held with analysis pending. For a subset of analyses the samples will be extracted and held by the lab pending instructions from MACTEC-Olin.

VOCs: hold pending results of Category 2  
SVOCs: extract and hold pending results of Category 2  
NDMA: extract and hold pending results of Category 2  
DMF: extract and hold pending results of Category 2  
Hydrazine: hold pending results of Category 2  
Metals: hold pending results of Category 2  
Mercury: hold pending results of Category 2  
Hexavalent Chromium: hold pending results of Category 2  
Phthalic anhydride: extract and hold pending results of Category 2  
Formaldehyde/acetaldehyde: run normal TAT  
Anions: run normal TAT  
Ammonia: run normal TAT

For rush TAT samples the laboratory will provide preliminary results with a narrative and sample results summary report. The lab will also provide data on a preliminary data EDD. Final result and supporting data packages will be provided in the normal TAT for the project.

6  
5  
4  
3  
2  
1  
000003



# Katahdin Analytical Services

## Login Chain of Custody Report (Ino1)

Page: 1 of 1

**Login Number:** SC5256

Account: OLINCO001  
Olin Corporation

Project:

**Primary Report Address:**

Chris Ricardi  
Mactec Engineering and Consulting  
P.O. Box 7050 DTS

Portland, ME 04112-7050

csricardi@mactec.com

**Primary Invoice Address:**

ERG  
Olin Corporation  
3855 North Ocoee St  
Suite 200  
Cleveland, TN 37312

NoWeb

### Login Information

ANALYSIS INSTRUCTIONS :  
CHECK NO. :  
CLIENT PO# : ERRE9844 REWI0014  
COOLER TEMPERATURE : 1.0  
DELIVERY SERVICES : Client  
EDD FORMAT : KAS075-CSV  
PM : AJC  
PROJECT NAME : Wilmington  
QC LEVEL : IV  
REGULATORY LIST :  
REPORT INSTRUCTIONS : Send rpt & EDD on CD, no hc. Email SDS to csricardi@mactec.com. Email EDD to kjchatterton@mactec.com. Data summary needs all forms. EDD sample ID needs to match the ID on the COC.  
SDG ID : WIL-7  
SDG STATUS : Begin

**Report CC Addresses:**

**Invoice CC Addresses:**

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SC5256-1	OC-SB-472-30/32-XXX	04-SEP-09 08:50	04-SEP-09			23-SEP-09	
<i>Matrix</i>	<i>Product</i>	<i>Hold Date (shortest)</i>		<i>Bottle Type</i>	<i>Bottle Count</i>		<i>Comments</i>
Solid	S SW8033M	18-SEP-09		100g Glass	1		

**Total Samples:** 1

**Total Analyses:** 2

0000033



# Katahdin Analytical Services

## Login Chain of Custody Report (Ino1)

Page: 1 of 1

**Login Number:** SC5326

Account: OLINCO001

Olin Corporation

Project:

**Primary Report Address:**

Chris Ricardi

Mactec Engineering and Consulting  
P.O. Box 7050 DTS

Portland, ME 04112-7050

csricardi@mactec.com

**Primary Invoice Address:**

ERG

Olin Corporation

3855 North Ocoee St  
Suite 200  
Cleveland, TN 37312

**Report CC Addresses:**

**Invoice CC Addresses:**

NoWeb

### Login Information

ANALYSIS INSTRUCTIONS :  
CHECK NO. :  
CLIENT PO# : ERRE9844 REWI0014  
COOLER TEMPERATURE : 1.1  
DELIVERY SERVICES : Fed Ex  
EDD FORMAT : KAS075-CSV  
PM : AJC  
PROJECT NAME : Wilmington  
QC LEVEL : IV  
REGULATORY LIST :  
REPORT INSTRUCTIONS : Send rpt & EDD on CD, no hc. Email SDS to csricardi@mactec.com. Email EDD to kjchatterton@mactec.com. Data summary needs all forms. EDD sample ID needs to match the ID on the COC.  
SDG ID : WIL-7  
SDG STATUS : Cont.

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SC5326-1	OC-SB-450-0.0/1.0-X	09-SEP-09 13:40	10-SEP-09			29-SEP-09	
Matrix	Product	Hold Date (shortest)	Bottle Type		Bottle Count		Comments
Solid	S SW8033M	23-SEP-09	100g Glass		1		
Solid	S TS	09-OCT-09					
SC5326-2	OC-SB-450-8.0/10-XX	09-SEP-09 13:55	10-SEP-09			29-SEP-09	
Matrix	Product	Hold Date (shortest)	Bottle Type		Bottle Count		Comments
Solid	S SW8033M	23-SEP-09	100g Glass		1		
Solid	S TS	09-OCT-09					
SC5326-3	OC-SB-466-30/32-XXX	08-SEP-09 15:50	10-SEP-09			29-SEP-09	
Matrix	Product	Hold Date (shortest)	Bottle Type		Bottle Count		Comments
Solid	S SW8033M	22-SEP-09	100g Glass		1		
Solid	S TS	08-OCT-09					
SC5326-4	OC-SB-466-6.0/8.0-X	08-SEP-09 13:50	10-SEP-09			29-SEP-09	
Matrix	Product	Hold Date (shortest)	Bottle Type		Bottle Count		Comments
Solid	S SW8033M	22-SEP-09	100g Glass		1		
Solid	S TS	08-OCT-09					
SC5326-5	OC-EBK-008	08-SEP-09 11:00	10-SEP-09			29-SEP-09	
Matrix	Product	Hold Date (shortest)	Bottle Type		Bottle Count		Comments
Aqueous	S SW8033M	22-SEP-09	40mL Vial+HCl		2		

Total Samples: 5

Total Analyses: 9

0000034



Katahdin Analytical Services  
Login Chain of Custody Report (Ino1)

Page: 1 of 2

**Login Number:** SC5415

Account: OLINCO001  
Olin Corporation

Project:

**Primary Report Address:**

Chris Ricardi  
Mactec Engineering and Consulting  
P.O. Box 7050 DTS

Portland, ME 04112-7050  
csricardi@mactec.com

**Primary Invoice Address:**

ERG  
Olin Corporation  
3855 North Ocoee St  
Suite 200  
Cleveland, TN 37312

NoWeb

**Login Information**

ANALYSIS INSTRUCTIONS	:
CHECK NO.	:
CLIENT PO#	: ERRE9844 REWI0014
COOLER TEMPERATURE	: -0.6
DELIVERY SERVICES	: Client
EDD FORMAT	: KAS075-CSV
PM	: AJC
PROJECT NAME	: Wilmington
QC LEVEL	: IV
REGULATORY LIST	:
REPORT INSTRUCTIONS	: Send rpt & EDD on CD, no hc. Email SDS to csricardi@mactec.com. Email EDD to kjchatterton@mactec.com. Data summary needs all forms. EDD sample ID needs to match the ID on the COC.
SDG ID	: WIL-7
SDG STATUS	: Cont.

**Report CC Addresses:**

**Invoice CC Addresses:**

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SC5415-1	OC-SB-427-0.0/1.0-X	10-SEP-09 13:40	12-SEP-09			01-OCT-09	
<i>Matrix</i>	<i>Product</i>	<i>Hold Date (shortest)</i>	<i>Bottle Type</i>		<i>Bottle Count</i>		<i>Comments</i>
Solid	S SW8033M	24-SEP-09	100g Glass		1		
Solid	S TS	10-OCT-09					
SC5415-2	OC-SB-434-0.0/1.0-X	10-SEP-09 07:50	12-SEP-09			01-OCT-09	
<i>Matrix</i>	<i>Product</i>	<i>Hold Date (shortest)</i>	<i>Bottle Type</i>		<i>Bottle Count</i>		<i>Comments</i>
Solid	S SW8033M	24-SEP-09	100g Glass		1		
Solid	S TS	10-OCT-09					
SC5415-3	OC-SB-434-7.0/9.0-X	10-SEP-09 08:15	12-SEP-09			01-OCT-09	
<i>Matrix</i>	<i>Product</i>	<i>Hold Date (shortest)</i>	<i>Bottle Type</i>		<i>Bottle Count</i>		<i>Comments</i>
Solid	S SW8033M	24-SEP-09	100g Glass		1		
Solid	S TS	10-OCT-09					
SC5415-4	OC-SB-456-0.0/1.0-X	11-SEP-09 08:30	12-SEP-09			01-OCT-09	
<i>Matrix</i>	<i>Product</i>	<i>Hold Date (shortest)</i>	<i>Bottle Type</i>		<i>Bottle Count</i>		<i>Comments</i>
Solid	S SW8033M	25-SEP-09	100g Glass		1		
Solid	S TS	11-OCT-09					
SC5415-5	OC-SB-456-16/18-XXX	11-SEP-09 10:40	12-SEP-09			01-OCT-09	
<i>Matrix</i>	<i>Product</i>	<i>Hold Date (shortest)</i>	<i>Bottle Type</i>		<i>Bottle Count</i>		<i>Comments</i>
Solid	S SW8033M	25-SEP-09	100g Glass		1		
Solid	S TS	11-OCT-09					
SC5415-6	OC-SB-456-7.0/9.0-D	11-SEP-09 09:00	12-SEP-09			01-OCT-09	
<i>Matrix</i>	<i>Product</i>	<i>Hold Date (shortest)</i>	<i>Bottle Type</i>		<i>Bottle Count</i>		<i>Comments</i>
Solid	S SW8033M	25-SEP-09	100g Glass		1		
Solid	S TS	11-OCT-09					
SC5415-7	OC-SB-456-7.0/9.0-X	11-SEP-09 09:00	12-SEP-09			01-OCT-09	
<i>Matrix</i>	<i>Product</i>	<i>Hold Date (shortest)</i>	<i>Bottle Type</i>		<i>Bottle Count</i>		<i>Comments</i>
Solid	S SW8033M	25-SEP-09	100g Glass		3		MS/MSD
Solid	S TS	11-OCT-09					

0000035



**Katahdin Analytical Services**  
**Login Chain of Custody Report (Ino1)**  
Sep. 14, 2009  
02:54 PM

Page: 2 of 2

**Login Number: SC5415**

Account: OLINCO001                          NoWeb  
Olin Corporation

Project:

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	Verbal PR	Due Date	Mailed
SC5415-8	OC-SB-457-0.0/1.0-X	11-SEP-09 13:10	12-SEP-09		01-OCT-09	
<i>Matrix</i>	<i>Product</i>	<i>Hold Date (shortest)</i>	<i>Bottle Type</i>	<i>Bottle Count</i>		<i>Comments</i>
Solid	S SW8033M	25-SEP-09	100g Glass	1		
Solid	S TS	11-OCT-09				
SC5415-9	OC-SB-457-8.0/10-XX	11-SEP-09 13:20	12-SEP-09		01-OCT-09	
<i>Matrix</i>	<i>Product</i>	<i>Hold Date (shortest)</i>	<i>Bottle Type</i>	<i>Bottle Count</i>		<i>Comments</i>
Solid	S SW8033M	25-SEP-09	100g Glass	1		
Solid	S TS	11-OCT-09				

**Total Samples: 9**

**Total Analyses: 18**

0000036



# Katahdin Analytical Services

## Login Chain of Custody Report (Ino1)

Page: 1 of 1

Sep. 21, 2009  
03:37 PM

**Login Number:** SC5605

Account: OLINCO001  
Olin Corporation

Project:

**Primary Report Address:**

Chris Ricardi  
Mactec Engineering and Consulting  
P.O. Box 7050 DTS

Portland, ME 04112-7050

csricardi@mactec.com

**Primary Invoice Address:**

ERG  
Olin Corporation  
3855 North Ocoee St  
Suite 200  
Cleveland, TN 37312

**Report CC Addresses:**

**Invoice CC Addresses:**

NoWeb

### Login Information

ANALYSIS INSTRUCTIONS :  
CHECK NO. :  
CLIENT PO# : ERRE9844 REWI0014  
COOLER TEMPERATURE : 0.8  
DELIVERY SERVICES : Client  
EDD FORMAT : KAS075-CSV  
PM : AJC  
PROJECT NAME : Wilmington  
QC LEVEL : IV  
REGULATORY LIST :  
REPORT INSTRUCTIONS : Send rpt & EDD on CD, no hc. Email SDS & EDD to csricardi@mactec.com and kjchatterton@mactec.com. Data summary needs all forms. EDD sample ID needs to match the ID on the COC.  
SDG ID : WIL-7  
SDG STATUS : End

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SC5605-1	OC-SB-413-0.0/1.0-X	17-SEP-09 11:10	19-SEP-09			08-OCT-09	
<i>Matrix Product Hold Date (shortest) Bottle Type Bottle Count Comments</i>							
Solid S SW8033M		01-OCT-09	100g Glass		1		
Solid S TS		17-OCT-09					
SC5605-2	OC-SB-413-1.0/5.0-X	17-SEP-09 10:20	19-SEP-09			08-OCT-09	
<i>Matrix Product Hold Date (shortest) Bottle Type Bottle Count Comments</i>							
Solid S SW8033M		01-OCT-09	100g Glass		1		
Solid S TS		17-OCT-09					
SC5605-3	OC-SB-435-0.0/1.0-X	17-SEP-09 14:45	19-SEP-09			08-OCT-09	
<i>Matrix Product Hold Date (shortest) Bottle Type Bottle Count Comments</i>							
Solid S SW8033M		01-OCT-09	100g Glass		1		
Solid S TS		17-OCT-09					
SC5605-4	OC-SB-435-11/15-XXX	17-SEP-09 14:00	19-SEP-09			08-OCT-09	
<i>Matrix Product Hold Date (shortest) Bottle Type Bottle Count Comments</i>							
Solid S SW8033M		01-OCT-09	100g Glass		1		
Solid S TS		17-OCT-09					
SC5605-5	OC-SB-435-6.0/10-XX	17-SEP-09 13:35	19-SEP-09			08-OCT-09	
<i>Matrix Product Hold Date (shortest) Bottle Type Bottle Count Comments</i>							
Solid S SW8033M		01-OCT-09	100g Glass		1		
Solid S TS		17-OCT-09					
SC5605-6	OC-EBK-012	17-SEP-09 17:15	19-SEP-09			08-OCT-09	
<i>Matrix Product Hold Date (shortest) Bottle Type Bottle Count Comments</i>							
Aqueous S SW8033M		01-OCT-09	40mL Vial+HCl		2		

Total Samples: 6

Total Analyses: 11

000037

# **SAMPLE DATA SUMMARY PACKAGE**

## **KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS**

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

- U Indicates the compound was analyzed for but not detected above the laboratory Practical Quantitation Limit.
- \* Compound recovery outside of quality control limits.
- D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.
- E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.
- J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Limit (PQL), but above the Method Detection Limit (MDL).
  - or
- J Used for Pesticide/Aroclor analyte when there is a greater than 40% difference for detected concentrations between the two GC columns.
- B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.
- N Presumptive evidence of a compound based on a mass spectral library search.
- A Indicates that a tentatively identified compound is a suspected aldol-condensation product.
- P Used for Pesticide/Aroclor analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. (for CLP methods only).

## **KATAHDIN ANALYTICAL SERVICES – INORGANIC DATA QUALIFIERS**

**(Refer to BOD Qualifiers Page for BOD footnotes)**

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

- U Indicates the compound was analyzed for but not detected above the laboratory Practical Quantitation Limit.
- E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.
- J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Limit (PQL), but above the Method Detection Limit (MDL).
- I-7 The laboratory's Practical Quantitation Level could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.
- A-4 Please refer to cover letter or narrative for further information.
- MCL Maximum Contaminant Level
- NL No limit
- NFL No Free Liquid Present
- FLP Free Liquid Present
- NOD No Odor Detected
- TON Threshold Odor Number
- H1 Please note that the regulatory holding time for pH is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. pH for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.
- H2 Please note that the regulatory holding time for DO is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. DO for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.
- H3 Please note that the regulatory holding time for sulfite is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. Sulfite for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.
- H4 Please note that the regulatory holding time for residual chlorine is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. Residual chlorine for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.

**KATAHDIN ANALYTICAL SERVICES**  
Report of Analytical Results

Client: Olin Corporation  
Project: Wilmington  
PO No:  
Sample Date: 09/04/09  
Received Date: 09/04/09  
Extraction Date: 09/17/09  
Analysis Date: 08-OCT-2009 17:35  
Report Date: 10/09/2009  
Matrix: SOIL  
% Solids: 90.8

Lab ID: SC5256-1  
Client ID: OC-SB-472-30/32-XXX  
SDG: WIL-7  
Extracted by: JLP  
Extraction Method: 8033M  
Analyst: KT  
Analysis Method: SW846 8033M  
Lab Prep Batch: WG68776  
Units: mg/Kgdrwt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.82	1.0	0.80	0.82	0.82
	diethylformamide		95%				

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**KATAHDIN ANALYTICAL SERVICES**  
Report of Analytical Results

Client: Olin Corporation  
Project: Wilmington  
PO No:  
Sample Date: 09/09/09  
Received Date: 09/10/09  
Extraction Date: 09/17/09  
Analysis Date: 08-OCT-2009 17:50  
Report Date: 10/09/2009  
Matrix: SOIL  
% Solids: 94.3

Lab ID: SC5326-1  
Client ID: OC-SB-450-0.0/1.0-X  
SDG: WIL-7  
Extracted by: JLP  
Extraction Method: 8033M  
Analyst: KT  
Analysis Method: SW846 8033M  
Lab Prep Batch: WG68776  
Units: mg/Kgdrwt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.61	1.0	0.80	0.61	0.61
	diethylformamide		84%				

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**KATAHDIN ANALYTICAL SERVICES**  
Report of Analytical Results

Client: Olin Corporation  
Project: Wilmington  
PO No:  
Sample Date: 09/09/09  
Received Date: 09/10/09  
Extraction Date: 09/17/09  
Analysis Date: 08-OCT-2009 18:04  
Report Date: 10/09/2009  
Matrix: SOIL  
% Solids: 86.9

Lab ID: SC5326-2  
Client ID: OC-SB-450-8.0/10-XX  
SDG: WIL-7  
Extracted by: JLP  
Extraction Method: 8033M  
Analyst: KT  
Analysis Method: SW846 8033M  
Lab Prep Batch: WG68776  
Units: mg/Kgdrwt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.62	1.0	0.80	0.62	0.62
	diethylformamide		83%				

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**KATAHDIN ANALYTICAL SERVICES**  
Report of Analytical Results

Client: Olin Corporation  
Project: Wilmington  
PO No:  
Sample Date: 09/08/09  
Received Date: 09/10/09  
Extraction Date: 09/17/09  
Analysis Date: 08-OCT-2009 18:18  
Report Date: 10/09/2009  
Matrix: SOIL  
% Solids: 91.2

Lab ID: SC5326-3  
Client ID: OC-SB-466-30/32-XXX  
SDG: WIL-7  
Extracted by: JLP  
Extraction Method: 8033M  
Analyst: KT  
Analysis Method: SW846 8033M  
Lab Prep Batch: WG68776  
Units: mg/Kgdrwt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.60	1.0	0.80	0.60	0.60
	diethylformamide		90%				

Page 01 of 01 BCJ2087.d

**KATAHDIN ANALYTICAL SERVICES**  
Report of Analytical Results

Client: Olin Corporation  
Project: Wilmington  
PO No:  
Sample Date: 09/08/09  
Received Date: 09/10/09  
Extraction Date: 09/17/09  
Analysis Date: 08-OCT-2009 18:33  
Report Date: 10/09/2009  
Matrix: SOIL  
% Solids: 93.2

Lab ID: SC5326-4  
Client ID: OC-SB-466-6.0/8.0-X  
SDG: WIL-7  
Extracted by: JLP  
Extraction Method: 8033M  
Analyst: KT  
Analysis Method: SW846 8033M  
Lab Prep Batch: WG68776  
Units: mg/Kgdrwt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.61	1.0	0.80	0.61	0.61
	diethylformamide		91%				

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**KATAHDIN ANALYTICAL SERVICES**  
Report of Analytical Results

Client: Olin Corporation  
Project: Wilmington  
PO No:  
Sample Date: 09/08/09  
Received Date: 09/10/09  
Extraction Date:  
Analysis Date: 15-SEP-2009 14:20  
Report Date: 10/09/2009  
Matrix: WATER  
% Solids: NA

Lab ID: SC5326-5RA  
Client ID: OC-EBK-008  
SDG: WIL-7  
Extracted by:  
Extraction Method: 8033M  
Analyst: JLP  
Analysis Method: SW846 M8033  
Lab Prep Batch: WG68660  
Units: mg/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.020	1.0	0.020	0.020	0.0048
	diethylformamide		106%				

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**KATAHDIN ANALYTICAL SERVICES**  
Report of Analytical Results

Client: Olin Corporation Lab ID: SC5415-1  
Project: Wilmington Client ID: OC-SB-427-0.0/1.0-X  
PO No: SDG: WIL-7  
Sample Date: 09/10/09 Extracted by: JLP  
Received Date: 09/12/09 Extraction Method: 8033M  
Extraction Date: 09/17/09 Analyst: KT  
Analysis Date: 08-OCT-2009 19:16 Analysis Method: SW846 8033M  
Report Date: 10/09/2009 Lab Prep Batch: WG68776  
Matrix: SOIL Units: mg/Kgdrwt  
% Solids: 93.1

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.57	1.0	0.80	0.57	0.57
	diethylformamide		89%				

Page 01 of 01 BCJ2091.d

**KATAHDIN ANALYTICAL SERVICES**  
Report of Analytical Results

Client: Olin Corporation  
Project: Wilmington  
PO No:  
Sample Date: 09/10/09  
Received Date: 09/12/09  
Extraction Date: 09/17/09  
Analysis Date: 08-OCT-2009 19:31  
Report Date: 10/09/2009  
Matrix: SOIL  
% Solids: 93.6

Lab ID: SC5415-2  
Client ID: OC-SB-434-0.0/1.0-X  
SDG: WIL-7  
Extracted by: JLP  
Extraction Method: 8033M  
Analyst: KT  
Analysis Method: SW846 8033M  
Lab Prep Batch: WG68776  
Units: mg/Kgdrwt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.81	1.0	0.80	0.81	0.81
	diethylformamide		88%				

Page 01 of 01 BCJ2092.d

**KATAHDIN ANALYTICAL SERVICES**  
Report of Analytical Results

Client: Olin Corporation  
Project: Wilmington  
PO No:  
Sample Date: 09/10/09  
Received Date: 09/12/09  
Extraction Date: 09/17/09  
Analysis Date: 08-OCT-2009 19:45  
Report Date: 10/09/2009  
Matrix: SOIL  
% Solids: 91.5

Lab ID: SC5415-3  
Client ID: OC-SB-434-7.0/9.0-X  
SDG: WIL-7  
Extracted by: JLP  
Extraction Method: 8033M  
Analyst: KT  
Analysis Method: SW846 8033M  
Lab Prep Batch: WG68776  
Units: mg/Kgdrwt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.52	1.0	0.80	0.52	0.52
	diethylformamide		93%				

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**KATAHDIN ANALYTICAL SERVICES**  
Report of Analytical Results

Client: Olin Corporation  
Project: Wilmington  
PO No:  
Sample Date: 09/11/09  
Received Date: 09/12/09  
Extraction Date: 09/17/09  
Analysis Date: 08-OCT-2009 20:00  
Report Date: 10/09/2009  
Matrix: SOIL  
% Solids: 97.2

Lab ID: SC5415-4  
Client ID: OC-SB-456-0.0/1.0-X  
SDG: WIL-7  
Extracted by: JLP  
Extraction Method: 8033M  
Analyst: KT  
Analysis Method: SW846 8033M  
Lab Prep Batch: WG68776  
Units: mg/Kgdrwt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.61	1.0	0.80	0.61	0.61
	diethylformamide		82%				

Page 01 of 01 BCJ2094.d

**KATAHDIN ANALYTICAL SERVICES**  
Report of Analytical Results

Client: Olin Corporation  
Project: Wilmington  
PO No:  
Sample Date: 09/11/09  
Received Date: 09/12/09  
Extraction Date: 09/17/09  
Analysis Date: 08-OCT-2009 20:14  
Report Date: 10/09/2009  
Matrix: SOIL  
% Solids: 93.1

Lab ID: SC5415-5  
Client ID: OC-SB-456-16/18-XXX  
SDG: WIL-7  
Extracted by: JLP  
Extraction Method: 8033M  
Analyst: KT  
Analysis Method: SW846 8033M  
Lab Prep Batch: WG68776  
Units: mg/Kgdrwt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.50	1.0	0.80	0.50	0.50
	diethylformamide		85%				

Page 01 of 01 BCJ2095.d

**KATAHDIN ANALYTICAL SERVICES**  
Report of Analytical Results

Client: Olin Corporation  
Project: Wilmington  
PO No:  
Sample Date: 09/11/09  
Received Date: 09/12/09  
Extraction Date: 09/17/09  
Analysis Date: 08-OCT-2009 20:29  
Report Date: 10/09/2009  
Matrix: SOIL  
% Solids: 94.3

Lab ID: SC5415-6  
Client ID: OC-SB-456-7.0/9.0-D  
SDG: WIL-7  
Extracted by: JLP  
Extraction Method: 8033M  
Analyst: KT  
Analysis Method: SW846 8033M  
Lab Prep Batch: WG68776  
Units: mg/Kgdrwt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.70	1.0	0.80	0.70	0.70
	diethylformamide		87%				

Page 01 of 01 BCJ2096.d

**KATAHDIN ANALYTICAL SERVICES**  
Report of Analytical Results

Client: Olin Corporation  
Project: Wilmington  
PO No:  
Sample Date: 09/11/09  
Received Date: 09/12/09  
Extraction Date: 09/17/09  
Analysis Date: 08-OCT-2009 20:43  
Report Date: 10/09/2009  
Matrix: SOIL  
% Solids: 92.0

Lab ID: SC5415-7  
Client ID: SB-456-7.0/9.0-X  
SDG: WIL-7  
Extracted by: JLP  
Extraction Method: 8033M  
Analyst: KT  
Analysis Method: SW846 8033M  
Lab Prep Batch: WG68776  
Units: mg/Kgdrwt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.60	1.0	0.80	0.60	0.60
	diethylformamide		88%				

Page 01 of 01 BCJ2097.d

**KATAHDIN ANALYTICAL SERVICES**  
Report of Analytical Results

Client: Olin Corporation  
Project: Wilmington  
PO No:  
Sample Date: 09/11/09  
Received Date: 09/12/09  
Extraction Date: 09/17/09  
Analysis Date: 08-OCT-2009 20:57  
Report Date: 10/09/2009  
Matrix: SOIL  
% Solids: 94.9

Lab ID: SC5415-8  
Client ID: OC-SB-457-0.0/1.0-X  
SDG: WIL-7  
Extracted by: JLP  
Extraction Method: 8033M  
Analyst: KT  
Analysis Method: SW846 8033M  
Lab Prep Batch: WG68776  
Units: mg/Kgdrwt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.68	1.0	0.80	0.68	0.68
	diethylformamide		86%				

Page 01 of 01 BCJ2098.d

**KATAHDIN ANALYTICAL SERVICES**  
Report of Analytical Results

Client: Olin Corporation  
Project: Wilmington  
PO No:  
Sample Date: 09/11/09  
Received Date: 09/12/09  
Extraction Date: 09/17/09  
Analysis Date: 08-OCT-2009 21:12  
Report Date: 10/09/2009  
Matrix: SOIL  
% Solids: 93.7

Lab ID: SC5415-9  
Client ID: OC-SB-457-8.0/10-XX  
SDG: WIL-7  
Extracted by: JLP  
Extraction Method: 8033M  
Analyst: KT  
Analysis Method: SW846 8033M  
Lab Prep Batch: WG68776  
Units: mg/Kgdrwt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.52	1.0	0.80	0.52	0.52
	diethylformamide		84%				

Page 01 of 01 BCJ2099.d

**KATAHDIN ANALYTICAL SERVICES**  
Report of Analytical Results

Client: Olin Corporation  
Project: Wilmington  
PO No:  
Sample Date: 09/17/09  
Received Date: 09/19/09  
Extraction Date: 09/23/09  
Analysis Date: 08-OCT-2009 23:08  
Report Date: 10/09/2009  
Matrix: SOIL  
% Solids: 73.2

Lab ID: SC5605-1  
Client ID: OC-SB-413-0.0/1.0-X  
SDG: WIL-7  
Extracted by: JLP  
Extraction Method: 8033M  
Analyst: KT  
Analysis Method: SW846 8033M  
Lab Prep Batch: WG68986  
Units: mg/Kgdrwt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.79	1.0	0.80	0.79	0.79
	diethylformamide		72%				

Page 01 of 01 BCJ2107.d

**KATAHDIN ANALYTICAL SERVICES**  
Report of Analytical Results

Client: Olin Corporation  
Project: Wilmington  
PO No:  
Sample Date: 09/17/09  
Received Date: 09/19/09  
Extraction Date: 09/23/09  
Analysis Date: 08-OCT-2009 23:23  
Report Date: 10/09/2009  
Matrix: SOIL  
% Solids: 88.6

Lab ID: SC5605-2  
Client ID: OC-SB-413-1.0/5.0-X  
SDG: WIL-7  
Extracted by: JLP  
Extraction Method: 8033M  
Analyst: KT  
Analysis Method: SW846 8033M  
Lab Prep Batch: WG68986  
Units: mg/Kgdrwt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.77	1.0	0.80	0.77	0.77
	diethylformamide		75%				

Page 01 of 01 BCJ2108.d

**KATAHDIN ANALYTICAL SERVICES**  
Report of Analytical Results

Client: Olin Corporation  
Project: Wilmington  
PO No:  
Sample Date: 09/17/09  
Received Date: 09/19/09  
Extraction Date: 09/23/09  
Analysis Date: 08-OCT-2009 23:37  
Report Date: 10/09/2009  
Matrix: SOIL  
% Solids: 19.3

Lab ID: SC5605-3  
Client ID: OC-SB-435-0.0/1.0-X  
SDG: WIL-7  
Extracted by: JLP  
Extraction Method: 8033M  
Analyst: KT  
Analysis Method: SW846 8033M  
Lab Prep Batch: WG68986  
Units: mg/Kgdrwt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	2.2	1.0	0.80	2.2	2.2
	diethylformamide		71%				

Page 01 of 01 BCJ2109.d

**KATAHDIN ANALYTICAL SERVICES**  
Report of Analytical Results

Client: Olin Corporation Lab ID: SC5605-4  
Project: Wilmington Client ID: OC-SB-435-11/15-XXX  
PO No: SDG: WIL-7  
Sample Date: 09/17/09 Extracted by: JLP  
Received Date: 09/19/09 Extraction Method: 8033M  
Extraction Date: 09/23/09 Analyst: KT  
Analysis Date: 08-OCT-2009 23:52 Analysis Method: SW846 8033M  
Report Date: 10/09/2009 Lab Prep Batch: WG68986  
Matrix: SOIL Units: mg/Kgdrwt  
% Solids: 91.7

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.48	1.0	0.80	0.48	0.48
	diethylformamide		75%				

Page 01 of 01 BCJ2110.d

KATAHDIN ANALYTICAL SERVICES  
Report of Analytical Results

Client: Olin Corporation Lab ID: SC5605-5  
Project: Wilmington Client ID: OC-SB-435-6.0/10-XX  
PO No: SDG: WIL-7  
Sample Date: 09/17/09 Extracted by: JLP  
Received Date: 09/19/09 Extraction Method: 8033M  
Extraction Date: 09/23/09 Analyst: KT  
Analysis Date: 09-OCT-2009 00:06 Analysis Method: SW846 8033M  
Report Date: 10/09/2009 Lab Prep Batch: WG68986  
Matrix: SOIL Units: mg/Kgdrwt  
% Solids: 91.5

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.45	1.0	0.80	0.45	0.45
	diethylformamide		76%				

Page 01 of 01 BCJ2111.d

**KATAHDIN ANALYTICAL SERVICES**  
Report of Analytical Results

Client: Olin Corporation  
Project: Wilmington  
PO No:  
Sample Date: 09/17/09  
Received Date: 09/19/09  
Extraction Date:  
Analysis Date: 23-SEP-2009 10:32  
Report Date: 10/09/2009  
Matrix: WATER  
% Solids: NA

Lab ID: SC5605-6  
Client ID: OC-EBK-012  
SDG: WIL-7  
Extracted by:  
Extraction Method: 8033M  
Analyst: JLP  
Analysis Method: SW846 M8033  
Lab Prep Batch: WG68988  
Units: mg/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.020	1.0	0.020	0.020	0.0048
	diethylformamide			79%			

Page 01 of 01 BCI6069.d

KATAHDIN ANALYTICAL SERVICES  
Report of Analytical Results

Client: Lab ID: WG68660-1  
Project: Wilmington Client ID: WG68660-Blank  
PO No: SDG: WIL-7  
Sample Date: Extracted by:  
Received Date: Extraction Method: 8033M  
Extraction Date: Analyst: JLP  
Analysis Date: 15-SEP-2009 12:42 Analysis Method: SW846 M8033  
Report Date: 10/09/2009 Lab Prep Batch: WG68660  
Matrix: WATER Units: mg/L  
% Solids: NA

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.020	1.0	0.020	0.020	0.0048
	diethylformamide		90%				

Page 01 of 01 BCI4086.d

**KATAHDIN ANALYTICAL SERVICES**  
Report of Analytical Results

Client: Lab ID: WG68988-1  
Project: Wilmington Client ID: WG68988-Blank  
PO No: SDG: WIL-7  
Sample Date: Extracted by:  
Received Date: Extraction Method: 8033M  
Extraction Date: Analyst: JLP  
Analysis Date: 23-SEP-2009 09:22 Analysis Method: SW846 M8033  
Report Date: 10/09/2009 Lab Prep Batch: WG68988  
Matrix: WATER Units: mg/L  
% Solids: NA

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.020	1.0	0.020	0.020	0.0048
	diethylformamide		111%				

Page 01 of 01 BCI6064.d

**KATAHDIN ANALYTICAL SERVICES**  
Report of Analytical Results

Client: Lab ID: WG68776-1  
Project: Wilmington Client ID: WG68776-Blank  
PO No: SDG: WIL-7  
Sample Date: Extracted by: JLP  
Received Date: Extraction Method: 8033M  
Extraction Date: 09/17/09 Analyst: KT  
Analysis Date: 08-OCT-2009 15:27 Analysis Method: SW846 8033M  
Report Date: 10/09/2009 Lab Prep Batch: WG68776  
Matrix: SOIL Units: mg/Kgdrwt  
% Solids: 100

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.80	1.0	0.80	0.80	0.80
	diethylformamide		75%				

Page 01 of 01 BCJ2075.d

**KATAHDIN ANALYTICAL SERVICES**  
Report of Analytical Results

Client: Lab ID: WG68986-1  
Project: Wilmington Client ID: WG68986-Blank  
PO No: SDG: WIL-7  
Sample Date: Extracted by: JLP  
Received Date: Extraction Method: 8033M  
Extraction Date: 09/23/09 Analyst: KT  
Analysis Date: 08-OCT-2009 21:26 Analysis Method: SW846 8033M  
Report Date: 10/09/2009 Lab Prep Batch: WG68986  
Matrix: SOIL Units: mg/Kgdrwt  
% Solids: 100

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.80	1.0	0.80	0.80	0.80
	diethylformamide		82%				

Page 01 of 01 BCJ2100.d

FORM 2  
SOIL DMF SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: KATAHDIN ANALYTICAL SERVICES

Lab Code: KAS

Project: WILMINGTON

SDG No.: WIL-7

Level: (low/med) LOW

	CLIENT SAMPLE ID	LAB SAMPLE ID	SMC1 #	SMC2 #	SMC3 #	SMC4 #	TOT OUT
01	WG68776-BLANK	WG68776-1	75				0
02	WG68776-LCS	WG68776-2	78				0
03	WG68776-LCSD	WG68776-3	112				0
04	SB-456-7.0/9.0-XMS	WG68776-4	92				0
05	SB-456-7.0/9.0-XMSD	WG68776-5	94				0
06	OC-SB-472-30/32-XXX	SC5256-1	95				0
07	OC-SB-450-0.0/1.0-X	SC5326-1	84				0
08	OC-SB-450-8.0/10-XX	SC5326-2	83				0
09	OC-SB-466-30/32-XXX	SC5326-3	90				0
10	OC-SB-466-6.0/8.0-X	SC5326-4	91				0
11	OC-SB-427-0.0/1.0-X	SC5415-1	89				0
12	OC-SB-434-0.0/1.0-X	SC5415-2	88				0
13	OC-SB-434-7.0/9.0-X	SC5415-3	93				0
14	OC-SB-456-0.0/1.0-X	SC5415-4	82				0
15	OC-SB-456-16/18-XXX	SC5415-5	85				0
16	OC-SB-456-7.0/9.0-D	SC5415-6	87				0
17	SB-456-7.0/9.0-X	SC5415-7	88				0
18	OC-SB-457-0.0/1.0-X	SC5415-8	86				0
19	OC-SB-457-8.0/10-XX	SC5415-9	84				0
20	WG68986-BLANK	WG68986-1	82				0
21	WG68986-LCS	WG68986-2	82				0
22	WG68986-LCSD	WG68986-3	87				0
23	OC-SB-413-0.0/1.0-X	SC5605-1	72				0
24	OC-SB-413-1.0/5.0-X	SC5605-2	75				0
25	OC-SB-435-0.0/1.0-X	SC5605-3	71				0
26	OC-SB-435-11/15-XXX	SC5605-4	75				0
27	OC-SB-435-6.0/10-XX	SC5605-5	76				0
28							

QC LIMITS  
(61-137)

SMC1 = diethylformamide

# Column to be used to flag recovery values

\* Values outside of contract required QC limits

D System Monitoring Compound diluted out

FORM 2  
WATER DMF SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: KATAHDIN ANALYTICAL SERVICES

Lab Code: KAS

Project: WILMINGTON

SDG No.: WIL-7

	CLIENT SAMPLE ID	LAB SAMPLE ID	SMC1 #	SMC2 #	SMC3 #	SMC4 #	TOT OUT
01	WG68660-BLANK	WG68660-1	90				0
02	WG68660-LCS	WG68660-2	114				0
03	WG68660-LCSD	WG68660-3	116				0
04	OC-EBK-008	SC5326-5RA	106				0
05	WG68988-BLANK	WG68988-1	111				0
06	WG68988-LCS	WG68988-2	141				0
07	WG68988-LCSD	WG68988-3	135				0
08	OC-EBK-012	SC5605-6	79				0
09							
10							
11							
12							
13							
14							
15							
16							
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24							
25							
26							
27							
28							

QC LIMITS

SMC1 = diethylformamide (56-154)

# Column to be used to flag recovery values

\* Values outside of contract required QC limits

D System Monitoring Compound diluted out

KATAHDIN ANALYTICAL SERVICES  
LAB CONTROL SAMPLE

Client: Lab ID: WG68660-2 & WG68660-3  
Project: Wilmington Client ID: WG68660-LCS & WG68660-LCSD  
PO No: SDG: WIL-7  
Sample Date: Extracted by:  
Received Date: Extraction Method: 8033M  
Extraction Date: Analyst: JLP  
Analysis Date: 09/15/09 Analysis Method: SW846 M8033  
Report Date: 10/09/2009 Lab Prep Batch: WG68660  
Matrix: WATER Units: mg/L

COMPOUND	LCS	LCSD	SAMPLE	LCS	LCSD	LCS	LCSD	%RPD	QC.	
	SPIKE	SPIKE	CONC.	CONC.	CONC.	%REC.	%REC.	%RPD	LIMIT	LIMITS
dimethylformamide	0.10	0.10	NA	0.08	0.08	78	85	9	30	70-130

KATAHDIN ANALYTICAL SERVICES  
LAB CONTROL SAMPLE

Client: Lab ID: WG68988-2 & WG68988-3  
Project: Wilmington Client ID: WG68988-LCS & WG68988-LCSD  
PO No: SDG: WIL-7  
Sample Date: Extracted by:  
Received Date: Extraction Method: 8033M  
Extraction Date: Analyst: JLP  
Analysis Date: 09/23/09 Analysis Method: SW846 M8033  
Report Date: 10/09/2009 Lab Prep Batch: WG68988  
Matrix: WATER Units: mg/L

COMPOUND	LCS	LCSD	SAMPLE	LCS	LCSD	LCS	LCSD	%RPD	QC.
	SPIKE	SPIKE	CONC.	CONC.	CONC.	%REC.	%REC.	%RPD	LIMITS
dimethylformamide	0.10	0.10	NA	0.08	0.08	80	82	2	30 70-130

KATAHDIN ANALYTICAL SERVICES  
LAB CONTROL SAMPLE

Client: Lab ID: WG68776-2 & WG68776-3  
Project: Wilmington Client ID: WG68776-LCS & WG68776-LCSD  
PO No: SDG: WIL-7  
Sample Date: Extracted by: JLP  
Received Date: Extraction Method: 8033M  
Extraction Date: 09/17/09 Analyst: KT  
Analysis Date: 10/08/09 Analysis Method: SW846 8033M  
Report Date: 10/09/2009 Lab Prep Batch: WG68776  
Matrix: SOIL Units: mg/Kgdrwt

COMPOUND	LCS SPIKE	LCSD SPIKE	SAMPLE CONC.	LCS CONC.	LCSD CONC.	LCS %REC.	LCSD %REC.	%RPD %RPD	QC. LIMIT	QC. LIMITS	
dimethylformamide	10	10	NA	6.6	10	*	66	103	44	50	70-130

KATAHDIN ANALYTICAL SERVICES  
LAB CONTROL SAMPLE

Client: Lab ID: WG68986-2 & WG68986-3  
Project: Wilmington Client ID: WG68986-LCS & WG68986-LCSD  
PO No: SDG: WIL-7  
Sample Date: Extracted by: JLP  
Received Date: Extraction Method: 8033M  
Extraction Date: 09/23/09 Analyst: KT  
Analysis Date: 10/08/09 Analysis Method: SW846 8033M  
Report Date: 10/09/2009 Lab Prep Batch: WG68986  
Matrix: SOIL Units: mg/Kgdrwt

COMPOUND	LCS SPIKE	LCSD SPIKE	SAMPLE CONC.	LCS CONC.	LCSD CONC.	LCS %REC.	LCSD %REC.	%RPD %RPD	QC. LIMIT	QC. LIMITS	
dimethylformamide	10	10	NA	6.7	7.2	*	67	72	7	50	70-130

**KATAHDIN ANALYTICAL SERVICES**  
**MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY**

Client: Olin Corporation  
Project: Wilmington  
PO No:  
Sample Date: 09/11/09  
Received Date: 09/12/09  
Extraction Date: 09/17/09  
Analysis Date: 10/08/09  
Report Date: 10/09/2009  
Matrix: SOIL

Lab ID: WG68776-4 & WG68776-5  
Client ID: SB-456-7.0/9.0-XMS & SB-456-7.0/9.0-XMSD  
SDG: WIL-7  
Extracted by: JLP  
Extraction Method: 8033M  
Analyst: KT  
Analysis Method: SW846 8033M  
Lab Prep Batch: WG68776  
Units: mg/Kgdrwt

COMPOUND	MS SPIKE	MSD SPIKE	SAMPLE CONC.	MS CONC.	MSD CONC.	MS %REC.	MSD %REC.	%RPD %RD	QC. LIMIT	QC. LIMITS
dimethylformamide	5.5	8.0	0.00	4.7	6.7	85	83	35	50	70-130

FORM 4  
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

Lab Name: KATAHDIN ANALYTICAL SERVICES      Lab Code: KAS

WG68660-BLANK

Project: WILMINGTON

SDG No.: WIL-7

Lab File ID: BCI4086

Lab Sample ID: WG68660-1

Date Analyzed: 09/15/09

Time Analyzed: 1242

GC Column: ZB-WAX      ID: 0.53 (mm)

Heated Purge: (Y/N) N

Instrument ID: GC11

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	WG68660-LCS	WG68660-2	BCI4087	09/15/09	1256
02	WG68660-LCSD	WG68660-3	BCI4089	09/15/09	1324
03	OC-EBK-008	SC5326-5RA	BCI4093	09/15/09	1420
04					
05					
06					
07					
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09					
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COMMENTS:

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FORM 4  
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

Lab Name: KATAHDIN ANALYTICAL SERVICES      Lab Code: KAS

WG68988-BLANK

Project: WILMINGTON

SDG No.: WIL-7

Lab File ID: BCI6064

Lab Sample ID: WG68988-1

Date Analyzed: 09/23/09

Time Analyzed: 0922

GC Column: ZB-WAX      ID: 0.53      (mm)

Heated Purge: (Y/N) N

Instrument ID: GC11

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01 WG68988-LCS	WG68988-2	BCI6065	09/23/09	0936
02 WG68988-LCSD	WG68988-3	BCI6067	09/23/09	1004
03 OC-EBK-012	SC5605-6	BCI6069	09/23/09	1032
04				
05				
06				
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COMMENTS:

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FORM 4  
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

Lab Name: KATAHDIN ANALYTICAL SERVICES      Lab Code: KAS

WG68776-BLANK

Project: WILMINGTON

SDG No.: WIL-7

Lab File ID: BCJ2075

Lab Sample ID: WG68776-1

Date Analyzed: 10/08/09

Time Analyzed: 1527

GC Column: ZB-WAX      ID: 0.53 (mm)

Heated Purge: (Y/N) N

Instrument ID: GC11

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	WG68776-LCS	WG68776-2	BCJ2076	10/08/09	1542
02	WG68776-LCSD	WG68776-3	BCJ2078	10/08/09	1610
03	SB-456-7.0/9.0-XMS	WG68776-4	BCJ2080	10/08/09	1638
04	SB-456-7.0/9.0-XMSD	WG68776-5	BCJ2082	10/08/09	1707
05	OC-SB-472-30/32-XXX	SC5256-1	BCJ2084	10/08/09	1735
06	OC-SB-450-0.0/1.0-X	SC5326-1	BCJ2085	10/08/09	1750
07	OC-SB-450-8.0/10-XX	SC5326-2	BCJ2086	10/08/09	1804
08	OC-SB-466-30/32-XXX	SC5326-3	BCJ2087	10/08/09	1818
09	OC-SB-466-6.0/8.0-X	SC5326-4	BCJ2088	10/08/09	1833
10	OC-SB-427-0.0/1.0-X	SC5415-1	BCJ2091	10/08/09	1916
11	OC-SB-434-0.0/1.0-X	SC5415-2	BCJ2092	10/08/09	1931
12	OC-SB-434-7.0/9.0-X	SC5415-3	BCJ2093	10/08/09	1945
13	OC-SB-456-0.0/1.0-X	SC5415-4	BCJ2094	10/08/09	2000
14	OC-SB-456-16/18-XXX	SC5415-5	BCJ2095	10/08/09	2014
15	OC-SB-456-7.0/9.0-D	SC5415-6	BCJ2096	10/08/09	2029
16	SB-456-7.0/9.0-X	SC5415-7	BCJ2097	10/08/09	2043
17	OC-SB-457-0.0/1.0-X	SC5415-8	BCJ2098	10/08/09	2057
18	OC-SB-457-8.0/10-XX	SC5415-9	BCJ2099	10/08/09	2112
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COMMENTS:

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FORM 4  
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

Lab Name: KATAHDIN ANALYTICAL SERVICES      Lab Code: KAS

WG68986-BLANK

Project: WILMINGTON      SDG No.: WIL-7

Lab File ID: BCJ2100      Lab Sample ID: WG68986-1

Date Analyzed: 10/08/09      Time Analyzed: 2126

GC Column: ZB-WAX      ID: 0.53 (mm)      Heated Purge: (Y/N) N

Instrument ID: GC11

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	WG68986-LCS	WG68986-2	BCJ2103	10/08/09	2210
02	WG68986-LCSD	WG68986-3	BCJ2105	10/08/09	2239
03	OC-SB-413-0.0/1.0-X	SC5605-1	BCJ2107	10/08/09	2308
04	OC-SB-413-1.0/5.0-X	SC5605-2	BCJ2108	10/08/09	2323
05	OC-SB-435-0.0/1.0-X	SC5605-3	BCJ2109	10/08/09	2337
06	OC-SB-435-11/15-XXX	SC5605-4	BCJ2110	10/08/09	2352
07	OC-SB-435-6.0/10-XX	SC5605-5	BCJ2111	10/09/09	0006
08					
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COMMENTS:

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FORM 6  
DMF INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project WILMINGTON

SDG No.: WIL-7

Instrument ID: GC11

Calibration Date(s): 09/15/09 09/15/09

Column: ZB-WAX ID: 0.53 (mm) Calibration Time(s): 0936 1143

LAB FILE ID: RF0.02: BCI4073 RF0.05: BCI4074 RF0.1: BCI4075  
RF0.25: BCI4077 RF0.5: BCI4079 RF1: BCI4082

COMPOUND	RF0.02	RF0.05	RF0.1	RF0.25	RF0.5	RF1	CURVE	COEFFICIENTS		%RSD	MAX %RSD
								A0	A1		
dimethylformamide	921	1500	3764	12201	24415	55088	LINR	2.106e-002	1.811e-005	0.99669	0.99000
diethylformamide	13241	25644	58420	154630	276360		LINR	9.989e-002	1.448e-005	0.99576	0.99000

FORM VI DMF

**Sample Data Summary A0000040**

FORM 6  
DMF INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project WILMINGTON SDG No.: WIL-7

Instrument ID: GC11 Calibration Date(s): 10/08/09 10/08/09

Column: ZB-WAX ID: 0.53 (mm) Calibration Time(s): 1042 1348

LAB FILE ID: RF0.02: BCJ2059 RF0.05: BCJ2060 RF0.1: BCJ2061  
RF0.25: BCJ2063 RF0.5: BCJ2072 RF1: BCJ2068

COMPOUND	RF0.02	RF0.05	RF0.1	RF0.25	RF0.5	RF1	CURVE	COEFFICIENTS		OR R^2	MAX %RSD	%RSD
								A0	A1			
dimethylformamide	5578	11606	26284	60752	108470	218910	LINR	-9.67e-003	4.605e-006	0.99901	0.99000	
diethylformamide	40915	91554	186960	455970	759670		LINR	2.296e-002	5.285e-006	0.99945	0.99000	

FORM VI DMF

FORM 7B  
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: WILMINGTON SDG No.: WIL-7

Instrument ID: GC11 Calibration Date: 09/15/09 Time: 1435

Lab File ID: BCI4094 Init. Calib. Date(s): 09/15/09 09/15/09

Init. Calib. Times: 0936 1143

GC Column: ZB-WAX ID: 0.53 (mm)

COMPOUND	RRF	or	RRF0.2500	CCAL	MIN	%D	or	MAX %D	or	CURV
	OR	AMOUNT	AMOUNT			RRF0.2500	RRF	%DRIFT	%DRIFT	TYPE
dimethylformamide	0.2084400	0.2500000	41392.000	0.01	-16.62	25.00	LINR			
diethylformamide	2.4826000	2.5000000	65813.000	0.01	-0.70	25.00	LINR			

FORM VII PEST

Sample Data Summary A0000042

FORM 7B  
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: WILMINGTON SDG No.: WIL-7

Instrument ID: GC11 Calibration Date: 09/23/09 Time: 0852

Lab File ID: BCI6062 Init. Calib. Date(s): 09/15/09 09/15/09

Init. Calib. Times: 0936 1143

GC Column: ZB-WAX ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF0.2500 or AMOUNT	CCAL RRF0.2500	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
dimethylformamide	0.2015400	0.2500000	39868.000	0.01	-19.38	25.00	LINR
diethylformamide	2.3109000	2.5000000	61071.000	0.01	-7.56	25.00	LINR

FORM VII PEST

Sample Data Summary A0000043

FORM 7B  
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: WILMINGTON SDG No.: WIL-7

Instrument ID: GC11 Calibration Date: 09/23/09 Time: 1212

Lab File ID: BCI6076 Init. Calib. Date(s): 09/15/09 09/15/09

Init. Calib. Times: 0936 1143

GC Column: ZB-WAX ID: 0.53 (mm)

COMPOUND	RRF0.2500		CCAL	MIN	%D or %DRIFT	MAX %D or %DRIFT	CURV	TYPE
	RRF or AMOUNT	or AMOUNT						
dimethylformamide	0.1692400	0.2500000	32732.000	0.01	-32.30	25.00	LINR	<
diethylformamide	1.8903000	2.5000000	49452.000	0.01	-24.39	25.00	LINR	<

FORM VII PEST

FORM 7B  
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: WILMINGTON SDG No.: WIL-7

Instrument ID: GC11 Calibration Date: 10/08/09 Time: 1847

Lab File ID: BCJ2089 Init. Calib. Date(s): 10/08/09 10/08/09

Init. Calib. Times: 1042 1348

GC Column: ZB-WAX ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF0.2500 or AMOUNT	CCAL RRF0.2500	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV
dimethylformamide	0.2272700	0.2500000	205790.00	0.01	-9.09	25.00	LINR
diethylformamide	2.2377000	2.5000000	167640.00	0.01	-10.49	25.00	LINR

FORM VII PEST

Sample Data Summary A0000045

FORM 7B  
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: WILMINGTON SDG No.: WIL-7

Instrument ID: GC11 Calibration Date: 10/08/09 Time: 2141

Lab File ID: BCJ2101 Init. Calib. Date(s): 10/08/09 10/08/09

Init. Calib. Times: 1042 1348

GC Column: ZB-WAX ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF0.2500 or AMOUNT	CCAL RRF0.2500	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
dimethylformamide	0.2173100	0.2500000	197140.00	0.01	-13.08	25.00	LINR
diethylformamide	2.0864000	2.5000000	156190.00	0.01	-16.54	25.00	LINR

FORM VII PEST

Sample Data Summary A0000046

FORM 7B  
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: WILMINGTON SDG No.: WIL-7

Instrument ID: GC11 Calibration Date: 10/09/09 Time: 0021

Lab File ID: BCJ2112 Init. Calib. Date(s): 10/08/09 10/08/09

Init. Calib. Times: 1042 1348

GC Column: ZB-WAX ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF0.2500 or AMOUNT	CCAL RRF0.2500	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
dimethylformamide	0.1929600	0.2500000	175990.00	0.01	-22.82	25.00	LINR
diethylformamide	1.6930000	2.5000000	126400.00	0.01	-32.28	25.00	LINR

FORM VII PEST

Sample Data Summary A0000047

FORM 8  
DMF ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: WILMINGTON SDG No.: WIL-7

GC Column: ZB-WAX ID: 0.53 (mm) Init. Calib. Date(s): 09/15/09 09/15/09

Instrument ID: GC11

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,  
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION				S1		
	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	RT #	RT #
01		ICAL 0.02	09/15/09	0936	2.69	
02		ICAL 0.05	09/15/09	0950	2.69	
03		ICAL 0.1	09/15/09	1004	2.69	
04		ICAL 0.25	09/15/09	1032	2.68	
05		ICAL 0.5	09/15/09	1101	2.69	
06		ICAL 1.0	09/15/09	1143		
07	WG68660-BLAN	WG68660-1	09/15/09	1242	2.69	
08	WG68660-LCS	WG68660-2	09/15/09	1256	2.68	
09	WG68660-LCSD	WG68660-3	09/15/09	1324	2.68	
10	OC-EBK-008	SC5326-5RA	09/15/09	1420	2.68	
11		CV 0.25	09/15/09	1435	2.68	
12		CV 0.25	09/23/09	0852	2.68	
13	WG68988-BLAN	WG68988-1	09/23/09	0922	2.68	
14	WG68988-LCS	WG68988-2	09/23/09	0936	2.68	
15	WG68988-LCSD	WG68988-3	09/23/09	1004	2.68	
16	OC-EBK-012	SC5605-6	09/23/09	1032	2.68	
17		CV 0.25	09/23/09	1212	2.68	
18						
19						
20						

QC LIMITS

S1 = diethylformamide (+/- 0.20 MINUTES)

# Column used to flag retention time values with an asterisk.

\* Values outside of QC limits.

FORM 8  
DMF ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: WILMINGTON

SDG No.: WIL-7

GC Column: ZB-WAX ID: 0.53 (mm) Init. Calib. Date(s): 10/08/09 10/08/09

Instrument ID: GC11

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,  
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION				S1	RT #	RT #
	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED		
01		ICAL 0.02	10/08/09	1042	4.75	
02		ICAL 0.05	10/08/09	1057	4.76	
03		ICAL 0.1	10/08/09	1111	4.76	
04		ICAL 0.25	10/08/09	1140	4.76	
05		ICAL 1.0	10/08/09	1251		
06		ICAL 0.5	10/08/09	1348	4.75	
07	WG68776-BLAN	WG68776-1	10/08/09	1527	4.73	
08	WG68776-LCS	WG68776-2	10/08/09	1542	4.73	
09	WG68776-LCSD	WG68776-3	10/08/09	1610	4.73	
10	SB-456-7.0/9	WG68776-4	10/08/09	1638	4.73	
11	SB-456-7.0/9	WG68776-5	10/08/09	1707	4.75	
12	OC-SB-472-30	SC5256-1	10/08/09	1735	4.76	
13	OC-SB-450-0.	SC5326-1	10/08/09	1750	4.75	
14	OC-SB-450-8.	SC5326-2	10/08/09	1804	4.75	
15	OC-SB-466-30	SC5326-3	10/08/09	1818	4.75	
16	OC-SB-466-6	SC5326-4	10/08/09	1833	4.76	
17		CV 0.25	10/08/09	1847	4.75	
18	OC-SB-427-0.	SC5415-1	10/08/09	1916	4.75	
19	OC-SB-434-0.	SC5415-2	10/08/09	1931	4.75	
20	OC-SB-434-7.	SC5415-3	10/08/09	1945	4.75	

QC LIMITS  
S1 = diethylformamide (+/- 0.20 MINUTES)

# Column used to flag retention time values with an asterisk.  
\* Values outside of QC limits.

FORM 8  
DMF ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: WILMINGTON

SDG No.: WIL-7

GC Column: ZB-WAX ID: 0.53 (mm) Init. Calib. Date(s): 10/08/09 10/08/09

Instrument ID: GC11

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,  
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
	S1 : 4.76				S1	
	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	RT #	RT #
01	OC-SB-456-0.	SC5415-4	10/08/09	2000	4.75	
02	OC-SB-456-16	SC5415-5	10/08/09	2014	4.75	
03	OC-SB-456-7.	SC5415-6	10/08/09	2029	4.75	
04	SB-456-7.0/9	SC5415-7	10/08/09	2043	4.75	
05	OC-SB-457-0.	SC5415-8	10/08/09	2057	4.75	
06	OC-SB-457-8.	SC5415-9	10/08/09	2112	4.75	
07	WG68986-BLAN	WG68986-1	10/08/09	2126	4.76	
08		CV 0.25	10/08/09	2141	4.75	
09	WG68986-LCS	WG68986-2	10/08/09	2210	4.75	
10	WG68986-LCSD	WG68986-3	10/08/09	2239	4.75	
11	OC-SB-413-0.	SC5605-1	10/08/09	2308	4.75	
12	OC-SB-413-1.	SC5605-2	10/08/09	2323	4.75	
13	OC-SB-435-0.	SC5605-3	10/08/09	2337	4.75	
14	OC-SB-435-11	SC5605-4	10/08/09	2352	4.75	
15	OC-SB-435-6.	SC5605-5	10/09/09	0006	4.75	
16		CV 0.25	10/09/09	0021	4.73	
17						
18						
19						
20						

QC LIMITS  
S1 = diethylformamide (+/- 0.20 MINUTES)

# Column used to flag retention time values with an asterisk.

\* Values outside of QC limits.

## Report of Analytical Results

**Client:** Chris Ricardi  
 Mactec Engineering and Consulting  
 P.O. Box 7050 DTS  
 Portland, ME 04112-7050

**Lab Sample ID:** SC5256-1  
**Report Date:** 08-OCT-09  
**Client PO:** ERRE9844 REWI0014  
**Project:** Wilmington  
**SDG:** WIL-7

### Sample Description

OC-SB-472-30/32-XXX

<u>Matrix</u>	<u>Date Sampled</u>	<u>Date Received</u>
SL	04-SEP-09	04-SEP-09

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
Total Solids	91.%	1	SM2540G	WG68699	16-SEP-09 08:30:00	ASTM D2216	15-SEP-09	JF	

## Report of Analytical Results

**Client:** Chris Ricardi  
 Mactec Engineering and Consulting  
 P.O. Box 7050 DTS  
 Portland, ME 04112-7050

**Lab Sample ID:** SC5326-1  
**Report Date:** 08-OCT-09  
**Client PO:** ERRE9844 REWI0014  
**Project:** Wilmington  
**SDG:** WIL-7

<u>Sample Description</u>	<u>Matrix</u>	<u>Date Sampled</u>	<u>Date Received</u>
OC-SB-450-0.0/1.0-X	SL	09-SEP-09	10-SEP-09

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
Total Solids	94. %	1	SM2540G	WG68904	21-SEP-09 10:00:00	ASTM D2216	18-SEP-09	JF	

## Report of Analytical Results

**Client:** Chris Ricardi  
Mactec Engineering and Consulting  
P.O. Box 7050 DTS  
Portland, ME 04112-7050

**Lab Sample ID:** SC5326-2  
**Report Date:** 08-OCT-09  
**Client PO:** ERRE9844 REWI0014  
**Project:** Wilmington  
**SDG:** WIL-7

**Sample Description**

OC-SB-450-8.0/10-XX

**Matrix**

SL

**Date Sampled**

09-SEP-09

**Date Received**

10-SEP-09

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
Total Solids	87. %	I	SM2540G	WG68904	21-SEP-09 10:00:00	ASTM D2216	18-SEP-09	JF	

## Report of Analytical Results

**Client:** Chris Ricardi  
Mactec Engineering and Consulting  
P.O. Box 7050 DTS  
Portland, ME 04112-7050

**Lab Sample ID:** SC5326-3  
**Report Date:** 08-OCT-09  
**Client PO:** ERRE9844 REW10014  
**Project:** Wilmington  
**SDG:** WIL-7

<u>Sample Description</u>	<u>Matrix</u>	<u>Date Sampled</u>	<u>Date Received</u>
OC-SB-466-30/32-XXX	SL	08-SEP-09	10-SEP-09

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
Total Solids	91. %	1	SM2540G	WG68904	21-SEP-09 10:00:00	ASTM D2216	18-SEP-09	JF	

## Report of Analytical Results

**Client:** Chris Ricardi  
 Mactec Engineering and Consulting  
 P.O. Box 7050 DTS  
 Portland, ME 04112-7050

**Lab Sample ID:** SC5326-4  
**Report Date:** 08-OCT-09  
**Client PO:** ERRE9844 REWI0014  
**Project:** Wilmington  
**SDG:** WIL-7

**Sample Description**

OC-SB-466-6.0/8.0-X

<b><u>Matrix</u></b>	<b><u>Date Sampled</u></b>	<b><u>Date Received</u></b>
SL	08-SEP-09	10-SEP-09

Parameter	Result	Adj PQI	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
Total Solids	93. %	1	SM2540G	WG68904	21-SEP-09 10:00:00	ASTM D2216	18-SEP-09	JF	

## Report of Analytical Results

**Client:** Chris Ricardi  
 Mactec Engineering and Consulting  
 P.O. Box 7050 DTS  
 Portland, ME 04112-7050

**Lab Sample ID:** SC5415-1  
**Report Date:** 08-OCT-09  
**Client PO:** ERRE9844 REWI0014  
**Project:** Wilmington  
**SDG:** WIL-7

<u>Sample Description</u>	<u>Matrix</u>	<u>Date Sampled</u>	<u>Date Received</u>
OC-SB-427-0.0/1.0-X	SL	10-SEP-09	12-SEP-09

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
Total Solids	93. %	1	SM2540G	WG68904	21-SEP-09 10:00:00	ASTM D2216	18-SEP-09	JF	

## Report of Analytical Results

**Client:** Chris Ricardi  
 Mactec Engineering and Consulting  
 P.O. Box 7050 DTS  
 Portland, ME 04112-7050

**Lab Sample ID:** SC5415-2  
**Report Date:** 08-OCT-09  
**Client PO:** ERRE9844 REWI0014  
**Project:** Wilmington  
**SDG:** WIL-7

<u>Sample Description</u>	<u>Matrix</u>	<u>Date Sampled</u>	<u>Date Received</u>
OC-SB-434-0.0/1.0-X	SL	10-SEP-09	12-SEP-09

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
Total Solids	94. %	1	SM2540G	WG68904	21-SEP-09 10:00:00	ASTM D2216	18-SEP-09	JF	

## Report of Analytical Results

**Client:** Chris Ricardi  
Mactec Engineering and Consulting  
P.O. Box 7050 DTS  
Portland, ME 04112-7050

**Lab Sample ID:** SC5415-3  
**Report Date:** 08-OCT-09  
**Client PO:** ERRE9844 REWI0014  
**Project:** Wilmington  
**SDG:** WIL-7

<u>Sample Description</u>	<u>Matrix</u>	<u>Date Sampled</u>	<u>Date Received</u>
OC-SB-434-7.0/9.0-X	SL	10-SEP-09	12-SEP-09

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
Total Solids	92. %	I	SM2540G	WG68904	21-SEP-09 10:00:00	ASTM D2216	18-SEP-09	JF	

## Report of Analytical Results

**Client:** Chris Ricardi  
 Mactec Engineering and Consulting  
 P.O. Box 7050 DTS  
 Portland, ME 04112-7050

**Lab Sample ID:** SC5415-4  
**Report Date:** 08-OCT-09  
**Client PO:** ERRE9844 REWI0014  
**Project:** Wilmington  
**SDG:** WIL-7

<u>Sample Description</u>	<u>Matrix</u>	<u>Date Sampled</u>	<u>Date Received</u>
OC-SB-456-0.0/1.0-X	SL	11-SEP-09	12-SEP-09

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
Total Solids	97. %	1	SM2540G	WG68904	21-SEP-09 10:00:00	ASTM D2216	18-SEP-09	JF	

## Report of Analytical Results

**Client:** Chris Ricardi  
 Mactec Engineering and Consulting  
 P.O. Box 7050 DTS  
 Portland, ME 04112-7050

**Lab Sample ID:** SC5415-5  
**Report Date:** 08-OCT-09  
**Client PO:** ERRE9844 REWI0014  
**Project:** Wilmington  
**SDG:** WIL-7

**Sample Description**

OC-SB-456-16/18-XXX

**Matrix**

SL

**Date Sampled**

11-SEP-09

**Date Received**

12-SEP-09

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
Total Solids	93. %	I	SM2540G	WG68904	21-SEP-09 10:00:00	ASTM D2216	18-SEP-09	JF	

## Report of Analytical Results

**Client:** Chris Ricardi  
Mactec Engineering and Consulting  
P.O. Box 7050 DTS  
Portland, ME 04112-7050

**Lab Sample ID:** SC5415-6  
**Report Date:** 08-OCT-09  
**Client PO:** ERRE9844 REWI0014  
**Project:** Wilmington  
**SDG:** WIL-7

### Sample Description

OC-SB-456-7.0/9.0-D

<u>Matrix</u>	<u>Date Sampled</u>	<u>Date Received</u>
SL	11-SEP-09	12-SEP-09

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
Total Solids	94 %	I	SM2540G	WG68904	21-SEP-09 10:00:00	ASTM D2216	18-SEP-09	JF	

## Report of Analytical Results

**Client:** Chris Ricardi  
 Mactec Engineering and Consulting  
 P.O. Box 7050 DTS  
 Portland, ME 04112-7050

**Lab Sample ID:** SC5415-7  
**Report Date:** 08-OCT-09  
**Client PO:** ERRE9844 REWI0014  
**Project:** Wilmington  
**SDG:** WIL-7

<u>Sample Description</u>	<u>Matrix</u>	<u>Date Sampled</u>	<u>Date Received</u>
OC-SB-456-7.0/9.0-X	SL	11-SEP-09	12-SEP-09

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
Total Solids	92. %	I	SM2540G	WG68904	21-SEP-09 10:00:00	ASTM D2216	18-SEP-09	JF	

## Report of Analytical Results

**Client:** Chris Ricardi  
 Mactec Engineering and Consulting  
 P.O. Box 7050 DTS  
 Portland, ME 04112-7050

**Lab Sample ID:** SC5415-8  
**Report Date:** 08-OCT-09  
**Client PO:** ERRE9844 REWI0014  
**Project:** Wilmington  
**SDG:** WIL-7

<u>Sample Description</u>	<u>Matrix</u>	<u>Date Sampled</u>	<u>Date Received</u>
OC-SB-457-0.0/1.0-X	SL	11-SEP-09	12-SEP-09

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
Total Solids	95. %	1	SM2540G	WG68904	21-SEP-09 10:00:00	ASTM D2216	18-SEP-09	JF	

## Report of Analytical Results

**Client:** Chris Ricardi  
 Mactec Engineering and Consulting  
 P.O. Box 7050 DTS  
 Portland, ME 04112-7050

**Lab Sample ID:** SC5415-9  
**Report Date:** 08-OCT-09  
**Client PO:** ERRE9844 REWI0014  
**Project:** Wilmington  
**SDG:** WIL-7

**Sample Description**

OC-SB-457-8.010-XX

<b><u>Matrix</u></b>	<b><u>Date Sampled</u></b>	<b><u>Date Received</u></b>
SL	11-SEP-09	12-SEP-09

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
Total Solids	94.9%	1	SM2540G	WG68904	21-SEP-09 10:00:00	ASTM D2216	18-SEP-09	JF	

## Report of Analytical Results

**Client:** Chris Ricardi  
 Mactec Engineering and Consulting  
 P.O. Box 7050 DTS  
 Portland, ME 04112-7050

**Lab Sample ID:** SC5605-1  
**Report Date:** 08-OCT-09  
**Client PO:** ERRE9844 REWI0014  
**Project:** Wilmington  
**SDG:** WIL-7

<u>Sample Description</u>	<u>Matrix</u>	<u>Date Sampled</u>	<u>Date Received</u>
OC-SB-413-0.0/1.0-X	SL	17-SEP-09	19-SEP-09

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
Total Solids	73. %	1	SM2540G	WG69073	24-SEP-09 09:00:00	ASTM D2216	23-SEP-09	JF	

## Report of Analytical Results

**Client:** Chris Ricardi  
 Mactec Engineering and Consulting  
 P.O. Box 7050 DTS  
 Portland, ME 04112-7050

**Lab Sample ID:** SC5605-2  
**Report Date:** 08-OCT-09  
**Client PO:** ERRE9844 REWI0014  
**Project:** Wilmington  
**SDG:** WIL-7

**Sample Description**

OC-SB-413-1.0/5.0-X

<b><u>Matrix</u></b>	<b><u>Date Sampled</u></b>	<b><u>Date Received</u></b>
SL	17-SEP-09	19-SEP-09

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
Total Solids	88. %	1	SM2540G	WG69073	24-SEP-09 09:00:00	ASTM D2216	23-SEP-09	JF	

## Report of Analytical Results

**Client:** Chris Ricardi  
 Mactec Engineering and Consulting  
 P.O. Box 7050 DTS  
 Portland, ME 04112-7050

**Lab Sample ID:** SC5605-3  
**Report Date:** 08-OCT-09  
**Client PO:** ERRE9844 REWI0014  
**Project:** Wilmington  
**SDG:** WIL-7

**Sample Description**

OC-SB-435-0.0/1.0-X

<b><u>Matrix</u></b>	<b><u>Date Sampled</u></b>	<b><u>Date Received</u></b>
SL	17-SEP-09	19-SEP-09

<b>Parameter</b>	<b>Result</b>	<b>Adj PQL</b>	<b>Anal. Method</b>	<b>QC.Batch</b>	<b>Anal. Date</b>	<b>Prep. Method</b>	<b>Prep. Date</b>	<b>Analyst</b>	<b>Footnotes</b>
Total Solids	19. %	I	SM2540G	WG69073	24-SEP-09 09:00:00	ASTM D2216	23-SEP-09	JF	

## Report of Analytical Results

**Client:** Chris Ricardi  
 Mactec Engineering and Consulting  
 P.O. Box 7050 DTS  
 Portland, ME 04112-7050

**Lab Sample ID:** SC5605-4  
**Report Date:** 08-OCT-09  
**Client PO:** ERRE9844 REWI0014  
**Project:** Wilmington  
**SDG:** WIL-7

**Sample Description**

OC-SB-435-11/15-XXX

**Matrix**

SL

**Date Sampled**

17-SEP-09

**Date Received**

19-SEP-09

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
Total Solids	92. %	I	SM2540G	WG69073	24-SEP-09 09:00:00	ASTM D2216	23-SEP-09	JF	

## Report of Analytical Results

**Client:** Chris Ricardi  
 Mactec Engineering and Consulting  
 P.O. Box 7050 DTS  
 Portland, ME 04112-7050

**Lab Sample ID:** SC5605-5  
**Report Date:** 08-OCT-09  
**Client PO:** ERRE9844 REWI0014  
**Project:** Wilmington  
**SDG:** WIL-7

**Sample Description**

OC-SB-435-6.0/10-XX

<b><u>Matrix</u></b>	<b><u>Date Sampled</u></b>	<b><u>Date Received</u></b>
SL	17-SEP-09	19-SEP-09

<b>Parameter</b>	<b>Result</b>	<b>Adj PQL</b>	<b>Anal. Method</b>	<b>QC.Batch</b>	<b>Anal. Date</b>	<b>Prep. Method</b>	<b>Prep. Date</b>	<b>Analyst</b>	<b>Footnotes</b>
Total Solids	92.%	I	SM2540G	WG69073	24-SEP-09 09:00:00	ASTM D2216	23-SEP-09	JF	

## Quality Control Report

### Blank Sample Summary Report

#### Total Solids

<u>Samp Type</u>	<u>QC Batch</u>	<u>Anal. Method</u>	<u>Anal. Date</u>	<u>Prep. Date</u>	<u>Result</u>	<u>PQL</u>
MBLANK	WG68699	ASTM D2216	16-SEP-09	15-SEP-09	U 1 %	1 %

## Quality Control Report

### Blank Sample Summary Report

#### Total Solids

<u>Samp Type</u>	<u>QC Batch</u>	<u>Anal. Method</u>	<u>Anal. Date</u>	<u>Prep. Date</u>	<u>Result</u>	<u>PQL</u>
MBLANK	WG68904	ASTM D2216	21-SEP-09	18-SEP-09	U 1 %	1 %

## Quality Control Report

## Blank Sample Summary Report

**Total Solids**

<u>Samp Type</u>	<u>QC Batch</u>	<u>Anal. Method</u>	<u>Anal. Date</u>	<u>Prep. Date</u>	<u>Result</u>	<u>PQL</u>
MBLANK	WG69073	ASTM D2216	24-SEP-09	23-SEP-09	U 1 %	1 %

# Quality Control Report

## Laboratory Control Sample Summary Report

Cert No E87604

### Total Solids

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG68699-2	LCS	WG68699	16-SEP-09	15-SEP-09	%	90	90	100	80-120	

# Quality Control Report

## Laboratory Control Sample Summary Report

### **Total Solids**

Lab Sample Id	Samp Type	QC Batch	Analysis		Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
			Date	Prep Date						
WG68904-2	LCS	WG68904	21-SEP-09	18-SEP-09	%	90	90	100	80-120	
WG68904-4	LCSD	WG68904	21-SEP-09	18-SEP-09	%	90	90	100	80-120	0

# Quality Control Report

## Laboratory Control Sample Summary Report

### Total Solids

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG69073-2	LCS	WG69073	24-SEP-09	23-SEP-09	%	90	90	100	80-120	

## Quality Control Report Duplicate Sample Summary Report

### Total Solids

Duplicate Sample ID	Original Sample ID	QC Batch	Analysis Date	Result Units	Sample Result	Duplicate Result	RPD(%)	RPD Limit
WG68904-5	SC5415-5	WG68904	21-SEP-09	%	93.	93.	0	20

# **DMF DATA**

## QC Summary Section

FORM 2  
SOIL DMF SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: KATAHDIN ANALYTICAL SERVICES

Lab Code: KAS

Project: WILMINGTON

SDG No.: WIL-7

Level: (low/med) LOW

	CLIENT SAMPLE ID	LAB SAMPLE ID	SMC1 #	SMC2 #	SMC3 #	SMC4 #	TOT OUT
01	WG68776-BLANK	WG68776-1	75				0
02	WG68776-LCS	WG68776-2	78				0
03	WG68776-LCSD	WG68776-3	112				0
04	SB-456-7.0/9.0-XMS	WG68776-4	92				0
05	SB-456-7.0/9.0-XMSD	WG68776-5	94				0
06	OC-SB-472-30/32-XXX	SC5256-1	95				0
07	OC-SB-450-0.0/1.0-X	SC5326-1	84				0
08	OC-SB-450-8.0/10-XX	SC5326-2	83				0
09	OC-SB-466-30/32-XXX	SC5326-3	90				0
10	OC-SB-466-6.0/8.0-X	SC5326-4	91				0
11	OC-SB-427-0.0/1.0-X	SC5415-1	89				0
12	OC-SB-434-0.0/1.0-X	SC5415-2	88				0
13	OC-SB-434-7.0/9.0-X	SC5415-3	93				0
14	OC-SB-456-0.0/1.0-X	SC5415-4	82				0
15	OC-SB-456-16/18-XXX	SC5415-5	85				0
16	OC-SB-456-7.0/9.0-D	SC5415-6	87				0
17	SB-456-7.0/9.0-X	SC5415-7	88				0
18	OC-SB-457-0.0/1.0-X	SC5415-8	86				0
19	OC-SB-457-8.0/10-XX	SC5415-9	84				0
20	WG68986-BLANK	WG68986-1	82				0
21	WG68986-LCS	WG68986-2	82				0
22	WG68986-LCSD	WG68986-3	87				0
23	OC-SB-413-0.0/1.0-X	SC5605-1	72				0
24	OC-SB-413-1.0/5.0-X	SC5605-2	75				0
25	OC-SB-435-0.0/1.0-X	SC5605-3	71				0
26	OC-SB-435-11/15-XXX	SC5605-4	75				0
27	OC-SB-435-6.0/10-XX	SC5605-5	76				0
28							

QC LIMITS

SMC1 = diethylformamide (61-137)

# Column to be used to flag recovery values

\* Values outside of contract required QC limits

D System Monitoring Compound diluted out

FORM 2  
WATER DMF SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: KATAHDIN ANALYTICAL SERVICES

Lab Code: KAS

Project: WILMINGTON

SDG No.: WIL-7

	CLIENT SAMPLE ID	LAB SAMPLE ID	SMC1 #	SMC2 #	SMC3 #	SMC4 #	TOT OUT
01	WG68660-BLANK	WG68660-1	90				0
02	WG68660-LCS	WG68660-2	114				0
03	WG68660-LCSD	WG68660-3	116				0
04	OC-EBK-008	SC5326-5RA	106				0
05	WG68988-BLANK	WG68988-1	111				0
06	WG68988-LCS	WG68988-2	141				0
07	WG68988-LCSD	WG68988-3	135				0
08	OC-EBK-012	SC5605-6	79				0
09							
10							
11							
12							
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QC LIMITS

SMC1 = diethylformamide (56-154)

# Column to be used to flag recovery values

\* Values outside of contract required QC limits

D System Monitoring Compound diluted out

FORM 4  
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

Lab Name: KATAHDIN ANALYTICAL SERVICES      Lab Code: KAS

WG68660-BLANK

Project: WILMINGTON      SDG No.: WIL-7

Lab File ID: BCI4086      Lab Sample ID: WG68660-1

Date Analyzed: 09/15/09      Time Analyzed: 1242

GC Column: ZB-WAX      ID: 0.53 (mm)      Heated Purge: (Y/N) N

Instrument ID: GC11

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	WG68660-LCS	WG68660-2	BCI4087	09/15/09	1256
02	WG68660-LCSD	WG68660-3	BCI4089	09/15/09	1324
03	OC-EBK-008	SC5326-5RA	BCI4093	09/15/09	1420
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COMMENTS:

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FORM 4  
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

Lab Name: KATAHDIN ANALYTICAL SERVICES      Lab Code: KAS

WG68988-BLANK

Project: WILMINGTON      SDG No.: WIL-7

Lab File ID: BCI6064      Lab Sample ID: WG68988-1

Date Analyzed: 09/23/09      Time Analyzed: 0922

GC Column: ZB-WAX      ID: 0.53 (mm)      Heated Purge: (Y/N) N

Instrument ID: GC11

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	WG68988-LCS	WG68988-2	BCI6065	09/23/09	0936
02	WG68988-LCSD	WG68988-3	BCI6067	09/23/09	1004
03	OC-EBK-012	SC5605-6	BCI6069	09/23/09	1032
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COMMENTS:

FORM 4  
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

Lab Name: KATAHDIN ANALYTICAL SERVICES      Lab Code: KAS

WG68776-BLANK

Project: WILMINGTON

SDG No.: WIL-7

Lab File ID: BCJ2075

Lab Sample ID: WG68776-1

Date Analyzed: 10/08/09

Time Analyzed: 1527

GC Column: ZB-WAX      ID: 0.53 (mm)

Heated Purge: (Y/N) N

Instrument ID: GC11

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	WG68776-LCS	WG68776-2	BCJ2076	10/08/09	1542
02	WG68776-LCSD	WG68776-3	BCJ2078	10/08/09	1610
03	SB-456-7.0/9.0-XMS	WG68776-4	BCJ2080	10/08/09	1638
04	SB-456-7.0/9.0-XMSD	WG68776-5	BCJ2082	10/08/09	1707
05	OC-SB-472-30/32-XXX	SC5256-1	BCJ2084	10/08/09	1735
06	OC-SB-450-0.0/1.0-X	SC5326-1	BCJ2085	10/08/09	1750
07	OC-SB-450-8.0/10-XX	SC5326-2	BCJ2086	10/08/09	1804
08	OC-SB-466-30/32-XXX	SC5326-3	BCJ2087	10/08/09	1818
09	OC-SB-466-6.0/8.0-X	SC5326-4	BCJ2088	10/08/09	1833
10	OC-SB-427-0.0/1.0-X	SC5415-1	BCJ2091	10/08/09	1916
11	OC-SB-434-0.0/1.0-X	SC5415-2	BCJ2092	10/08/09	1931
12	OC-SB-434-7.0/9.0-X	SC5415-3	BCJ2093	10/08/09	1945
13	OC-SB-456-0.0/1.0-X	SC5415-4	BCJ2094	10/08/09	2000
14	OC-SB-456-16/18-XXX	SC5415-5	BCJ2095	10/08/09	2014
15	OC-SB-456-7.0/9.0-D	SC5415-6	BCJ2096	10/08/09	2029
16	SB-456-7.0/9.0-X	SC5415-7	BCJ2097	10/08/09	2043
17	OC-SB-457-0.0/1.0-X	SC5415-8	BCJ2098	10/08/09	2057
18	OC-SB-457-8.0/10-XX	SC5415-9	BCJ2099	10/08/09	2112
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COMMENTS:

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FORM 4  
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE ID

Lab Name: KATAHDIN ANALYTICAL SERVICES      Lab Code: KAS

WG68986-BLANK

Project: WILMINGTON      SDG No.: WIL-7

Lab File ID: BCJ2100      Lab Sample ID: WG68986-1

Date Analyzed: 10/08/09      Time Analyzed: 2126

GC Column: ZB-WAX      ID: 0.53 (mm)      Heated Purge: (Y/N) N

Instrument ID: GC11

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	WG68986-LCS	WG68986-2	BCJ2103	10/08/09	2210
02	WG68986-LCSD	WG68986-3	BCJ2105	10/08/09	2239
03	OC-SB-413-0.0/1.0-X	SC5605-1	BCJ2107	10/08/09	2308
04	OC-SB-413-1.0/5.0-X	SC5605-2	BCJ2108	10/08/09	2323
05	OC-SB-435-0.0/1.0-X	SC5605-3	BCJ2109	10/08/09	2337
06	OC-SB-435-11/15-XXX	SC5605-4	BCJ2110	10/08/09	2352
07	OC-SB-435-6.0/10-XX	SC5605-5	BCJ2111	10/09/09	0006
08					
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COMMENTS:

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FORM 8  
DMF ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: WILMINGTON

SDG No.: WIL-7

GC Column: ZB-WAX ID: 0.53 (mm) Init. Calib. Date(s): 09/15/09 09/15/09

Instrument ID: GC11

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,  
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION				S1	RT #	RT #	
	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1	RT #	RT #
01		ICAL 0.02	09/15/09	0936	2.69		
02		ICAL 0.05	09/15/09	0950	2.69		
03		ICAL 0.1	09/15/09	1004	2.69		
04		ICAL 0.25	09/15/09	1032	2.68		
05		ICAL 0.5	09/15/09	1101	2.69		
06		ICAL 1.0	09/15/09	1143			
07	WG68660-BLAN	WG68660-1	09/15/09	1242	2.69		
08	WG68660-LCS	WG68660-2	09/15/09	1256	2.68		
09	WG68660-LCSD	WG68660-3	09/15/09	1324	2.68		
10	OC-EBK-008	SC5326-5RA	09/15/09	1420	2.68		
11		CV 0.25	09/15/09	1435	2.68		
12		CV 0.25	09/23/09	0852	2.68		
13	WG68988-BLAN	WG68988-1	09/23/09	0922	2.68		
14	WG68988-LCS	WG68988-2	09/23/09	0936	2.68		
15	WG68988-LCSD	WG68988-3	09/23/09	1004	2.68		
16	OC-EBK-012	SC5605-6	09/23/09	1032	2.68		
17		CV 0.25	09/23/09	1212	2.68		
18							
19							
20							

QC LIMITS

S1 = diethylformamide                    (+/- 0.20 MINUTES)

# Column used to flag retention time values with an asterisk.

\* Values outside of QC limits.

FORM 8  
DMF ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: WILMINGTON SDG No.: WIL-7

GC Column: ZB-WAX ID: 0.53 (mm) Init. Calib. Date(s): 10/08/09 10/08/09

Instrument ID: GC11

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,  
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION				S1 : 4.76		
	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT #
01		ICAL 0.02	10/08/09	1042	4.75	
02		ICAL 0.05	10/08/09	1057	4.76	
03		ICAL 0.1	10/08/09	1111	4.76	
04		ICAL 0.25	10/08/09	1140	4.76	
05		ICAL 1.0	10/08/09	1251		
06		ICAL 0.5	10/08/09	1348	4.75	
07	WG68776-BLAN	WG68776-1	10/08/09	1527	4.73	
08	WG68776-LCS	WG68776-2	10/08/09	1542	4.73	
09	WG68776-LCSD	WG68776-3	10/08/09	1610	4.73	
10	SB-456-7.0/9	WG68776-4	10/08/09	1638	4.73	
11	SB-456-7.0/9	WG68776-5	10/08/09	1707	4.75	
12	OC-SB-472-30	SC5256-1	10/08/09	1735	4.76	
13	OC-SB-450-0.	SC5326-1	10/08/09	1750	4.75	
14	OC-SB-450-8.	SC5326-2	10/08/09	1804	4.75	
15	OC-SB-466-30	SC5326-3	10/08/09	1818	4.75	
16	OC-SB-466-6.	SC5326-4	10/08/09	1833	4.76	
17		CV 0.25	10/08/09	1847	4.75	
18	OC-SB-427-0.	SC5415-1	10/08/09	1916	4.75	
19	OC-SB-434-0.	SC5415-2	10/08/09	1931	4.75	
20	OC-SB-434-7.	SC5415-3	10/08/09	1945	4.75	

QC LIMITS

S1 = diethylformamide (+/- 0.20 MINUTES)

# Column used to flag retention time values with an asterisk.  
\* Values outside of QC limits.

FORM 8  
DMF ANALYTICAL SEQUENCE

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: WILMINGTON SDG No.: WIL-7

GC Column: ZB-WAX ID: 0.53 (mm) Init. Calib. Date(s): 10/08/09 10/08/09

Instrument ID: GC11

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,  
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION				S1	RT #	RT #
	CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED		
01	OC-SB-456-0.	SC5415-4	10/08/09	2000	4.75	
02	OC-SB-456-16	SC5415-5	10/08/09	2014	4.75	
03	OC-SB-456-7.	SC5415-6	10/08/09	2029	4.75	
04	SB-456-7.0/9	SC5415-7	10/08/09	2043	4.75	
05	OC-SB-457-0.	SC5415-8	10/08/09	2057	4.75	
06	OC-SB-457-8.	SC5415-9	10/08/09	2112	4.75	
07	WG68986-BLAN	WG68986-1	10/08/09	2126	4.76	
08		CV 0.25	10/08/09	2141	4.75	
09	WG68986-LCS	WG68986-2	10/08/09	2210	4.75	
10	WG68986-LCSD	WG68986-3	10/08/09	2239	4.75	
11	OC-SB-413-0.	SC5605-1	10/08/09	2308	4.75	
12	OC-SB-413-1.	SC5605-2	10/08/09	2323	4.75	
13	OC-SB-435-0.	SC5605-3	10/08/09	2337	4.75	
14	OC-SB-435-11	SC5605-4	10/08/09	2352	4.75	
15	OC-SB-435-6.	SC5605-5	10/09/09	0006	4.75	
16		CV 0.25	10/09/09	0021	4.73	
17						
18						
19						
20						

QC LIMITS

S1 = diethylformamide (+/- 0.20 MINUTES)

# Column used to flag retention time values with an asterisk.

\* Values outside of QC limits.

## **Sample Data Section**

## **KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS**

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

- U Indicates the compound was analyzed for but not detected above the laboratory Practical Quantitation Limit.
- \* Compound recovery outside of quality control limits.
- D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.
- E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.
- J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Limit (PQL), but above the Method Detection Limit (MDL).
  - or
- J Used for Pesticide/Aroclor analyte when there is a greater than 40% difference for detected concentrations between the two GC columns.
- B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.
- N Presumptive evidence of a compound based on a mass spectral library search.
- A Indicates that a tentatively identified compound is a suspected aldol-condensation product.
- P Used for Pesticide/Aroclor analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. (for CLP methods only).

# Katahdin Analytical Services, Inc.

## **Manual Integration Codes For GC/MS, GC, HPLC and/or IC**

M1	Peak splitting.
M2	Well defined peaks on the shoulders of the other peaks.
M3	There is additional area due to a coeluting interferant.
M4	There are negative spikes in the baseline.
M5	There are rising or falling baselines.
M6	The software has failed to detect a peak or misidentified a peak.
M7	Excessive peak tailing.
M8	Analysis such as GRO, DRO and TPH require a baseline hold.
M9	Peak was not completely integrated as in GC/MS.
M10	Primary ion was correctly integrated, but secondary or tertiary ion needed manual integration as in GC/MS.
M11	For GC analysis, when a sample is diluted by 1:10 or more, the surrogate is set to undetected and then the area under the surrogate is manually integrated.
M12	Manual integration saved in method due to TurboChrom floating point error.

KATAHDIN ANALYTICAL SERVICES  
Report of Analytical Results

Client: Olin Corporation  
Project: Wilmington  
PO No:  
Sample Date: 09/04/09  
Received Date: 09/04/09  
Extraction Date: 09/17/09  
Analysis Date: 08-OCT-2009 17:35  
Report Date: 10/09/2009  
Matrix: SOIL  
% Solids: 90.8

Lab ID: SC5256-1  
Client ID: OC-SB-472-30/32-XXX  
SDG: WIL-7  
Extracted by: JLP  
Extraction Method: 8033M  
Analyst: KT  
Analysis Method: SW846 8033M  
Lab Prep Batch: WG68776  
Units: mg/Kgdrwt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.82	1.0	0.80	0.82	0.82
	diethylformamide		95%				

Page 01 of 01 BCJ2084.d

Data File: \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2084.d  
Report Date: 09-Oct-2009 10:23

Katahdin Analytical Services

Data file : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2084.d  
Lab Smp Id: SC5256-1 Client Smp ID: OC-SB-472-30/32-XXX  
Inj Date : 08-OCT-2009 17:35  
Operator : KT Inst ID: gc11.i  
Smp Info : DMFB040A.M,GC11CJ08B1.B,1,SC5256-1  
Misc Info : SW846 8033M  
Comment :  
Method : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\dmfB040A.m  
Meth Date : 09-Oct-2009 10:22 jprescott Quant Type: ESTD  
Cal Date : 08-OCT-2009 13:48 Cal File: BCJ2072.d  
Als bottle: 1  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12

Concentration Formula: Amt \* DF \* (Vt/Vo)\*(100/(100-M)) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.04000	Volume of final extract (L)
Vo	0.00107	Sample Weight
M	9.157	% Moisture
Cpnd Variable		Local Compound Variable

Compounds	CONCENTRATIONS						REVIEW CODE	
	ON-COLUMN			FINAL				
	( mg/L )	(mg/Kgdrwt)	=====	=====	=====	=====		
\$ 2 diethylformamide	4.760	4.760	0.000	85338	0.47394	19.5 (M)	M5	

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Target\_server\GC\chem\gc11.i\GC11CJ08B1.b\BCJ2084.d  
Date : 08-OCT-2009 17:35

Client ID: OC-SB-472-30/32-XXX  
Sample Info: DMFB040A.M,GC11CJ08B1.B,1,SC5256-1  
Purge Volume: 0.0

Column phase: ZB-WAX

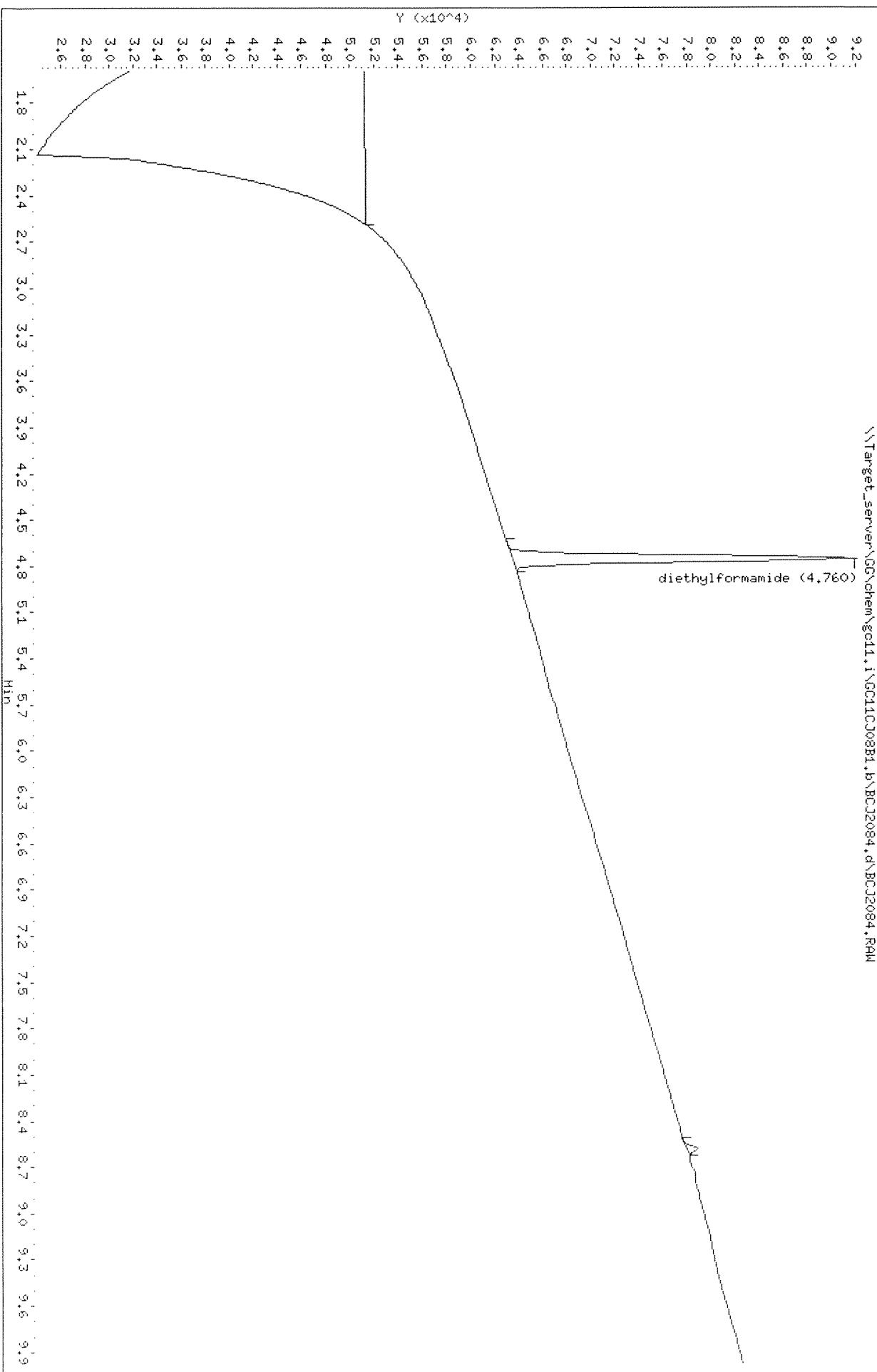
\\Target\_server\GC\chem\gc11.i\GC11CJ08B1.b\BCJ2084.RAW

diethylformamide (4.760)

Instrument: gc11.i

Operator: KT

Column diameter: 0.53



KATAHDIN ANALYTICAL SERVICES  
Report of Analytical Results

Client: Olin Corporation Lab ID: SC5326-1  
Project: Wilmington Client ID: OC-SB-450-0.0/1.0-X  
PO No: SDG: WIL-7  
Sample Date: 09/09/09 Extracted by: JLP  
Received Date: 09/10/09 Extraction Method: 8033M  
Extraction Date: 09/17/09 Analyst: KT  
Analysis Date: 08-OCT-2009 17:50 Analysis Method: SW846 8033M  
Report Date: 10/09/2009 Lab Prep Batch: WG68776  
Matrix: SOIL Units: mg/Kgdrwt  
% Solids: 94.3

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.61	1.0	0.80	0.61	0.61
	diethylformamide		84%				

Page 01 of 01 BCJ2085.d

Data File: \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2085.d  
Report Date: 09-Oct-2009 10:23

Katahdin Analytical Services

Data file : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2085.d  
Lab Smp Id: SC5326-1 Client Smp ID: OC-SB-450-0.0/1.0-X  
Inj Date : 08-OCT-2009 17:50  
Operator : KT Inst ID: gc11.i  
Smp Info : DMFB040A.M, GC11CJ08B1.B, 1, SC5326-1  
Misc Info : SW846 8033M  
Comment :  
Method : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\dmfB040A.m  
Meth Date : 09-Oct-2009 10:22 jprescott Quant Type: ESTD  
Cal Date : 08-OCT-2009 13:48 Cal File: BCJ2072.d  
Als bottle: 1  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12

Concentration Formula: Amt \* DF \* (Vt/Vo)\*(100/(100-M)) \* CpndVariable

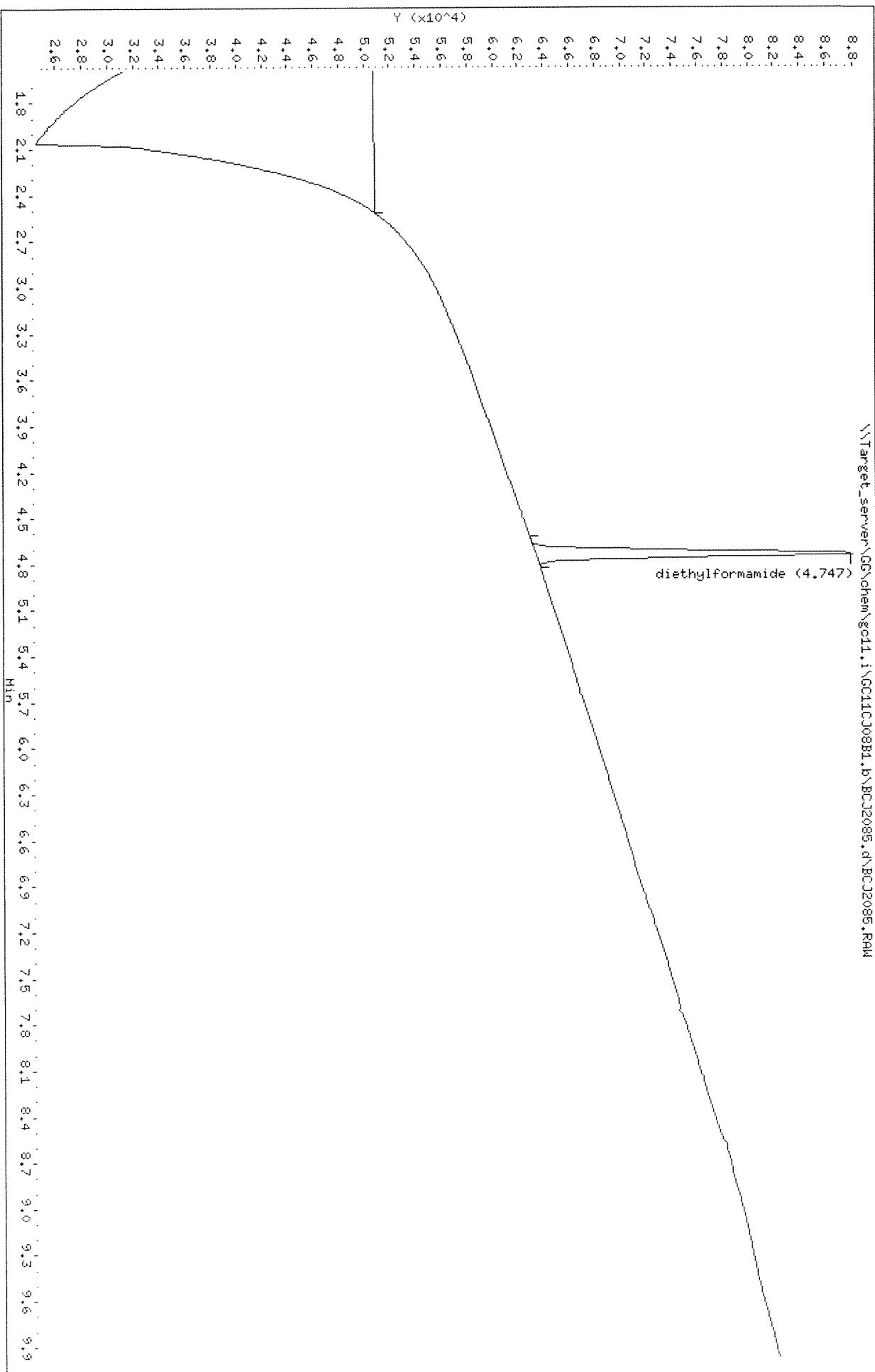
Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.04000	Volume of final extract (L)
Vo	0.00139	Sample Weight
M	5.670	% Moisture
Cpnd Variable		Local Compound Variable

Compounds	CONCENTRATIONS						REVIEW CODE
	RT	EXP RT	DLT RT	RESPONSE	( mg/L )	(mg/Kgdrwt)	
\$ 2 diethylformamide	4.746	4.760	-0.014	74723	0.41784	12.7 (M)	M5

QC Flag Legend

M - Compound response manually integrated.

100909



KATAHDIN ANALYTICAL SERVICES  
Report of Analytical Results

Client: Olin Corporation Lab ID: SC5326-2  
Project: Wilmington Client ID: OC-SB-450-8.0/10-XX  
PO No: SDG: WIL-7  
Sample Date: 09/09/09 Extracted by: JLP  
Received Date: 09/10/09 Extraction Method: 8033M  
Extraction Date: 09/17/09 Analyst: KT  
Analysis Date: 08-OCT-2009 18:04 Analysis Method: SW846 8033M  
Report Date: 10/09/2009 Lab Prep Batch: WG68776  
Matrix: SOIL Units: mg/Kgdrwt  
% Solids: 86.9

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.62	1.0	0.80	0.62	0.62
	diethylformamide		83%				

Page 01 of 01 BCJ2086.d

Data File: \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2086.d  
Report Date: 09-Oct-2009 10:23

Katahdin Analytical Services

Data file : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2086.d  
Lab Smp Id: SC5326-2 Client Smp ID: OC-SB-450-8.0/10-XX  
Inj Date : 08-OCT-2009 18:04  
Operator : KT Inst ID: gc11.i  
Smp Info : DMFB040A.M,GC11CJ08B1.B,1,SC5326-2  
Misc Info : SW846 8033M  
Comment :  
Method : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\dmfb040A.m  
Meth Date : 09-Oct-2009 10:22 jprescott Quant Type: ESTD  
Cal Date : 08-OCT-2009 13:48 Cal File: BCJ2072.d  
Als bottle: 1  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12

Concentration Formula: Amt \* DF \* (Vt/Vo)\*(100/(100-M)) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.04000	Volume of final extract (L)
Vo	0.00147	Sample Weight
M	13.058	% Moisture
Cpnd Variable		Local Compound Variable

Compounds	CONCENTRATIONS						REVIEW CODE
	RT	EXP RT	DLT RT	RESPONSE	( mg/L )	(mg/Kgdrwt)	
	=====	=====	=====	=====	=====	=====	
\$ 2 diethylformamide	4.746	4.760	-0.014	74002	0.41403	13.0 (M)	M5

QC Flag Legend

M - Compound response manually integrated.

JLP  
10/09/09

Data File: \\Target\_server\GC\chem\gc11.i\GC11CJ08B1.b\BCJ2086.d  
Date : 08-OCT-2009 18:04  
Client ID: OC-SR-450-8/10-XX

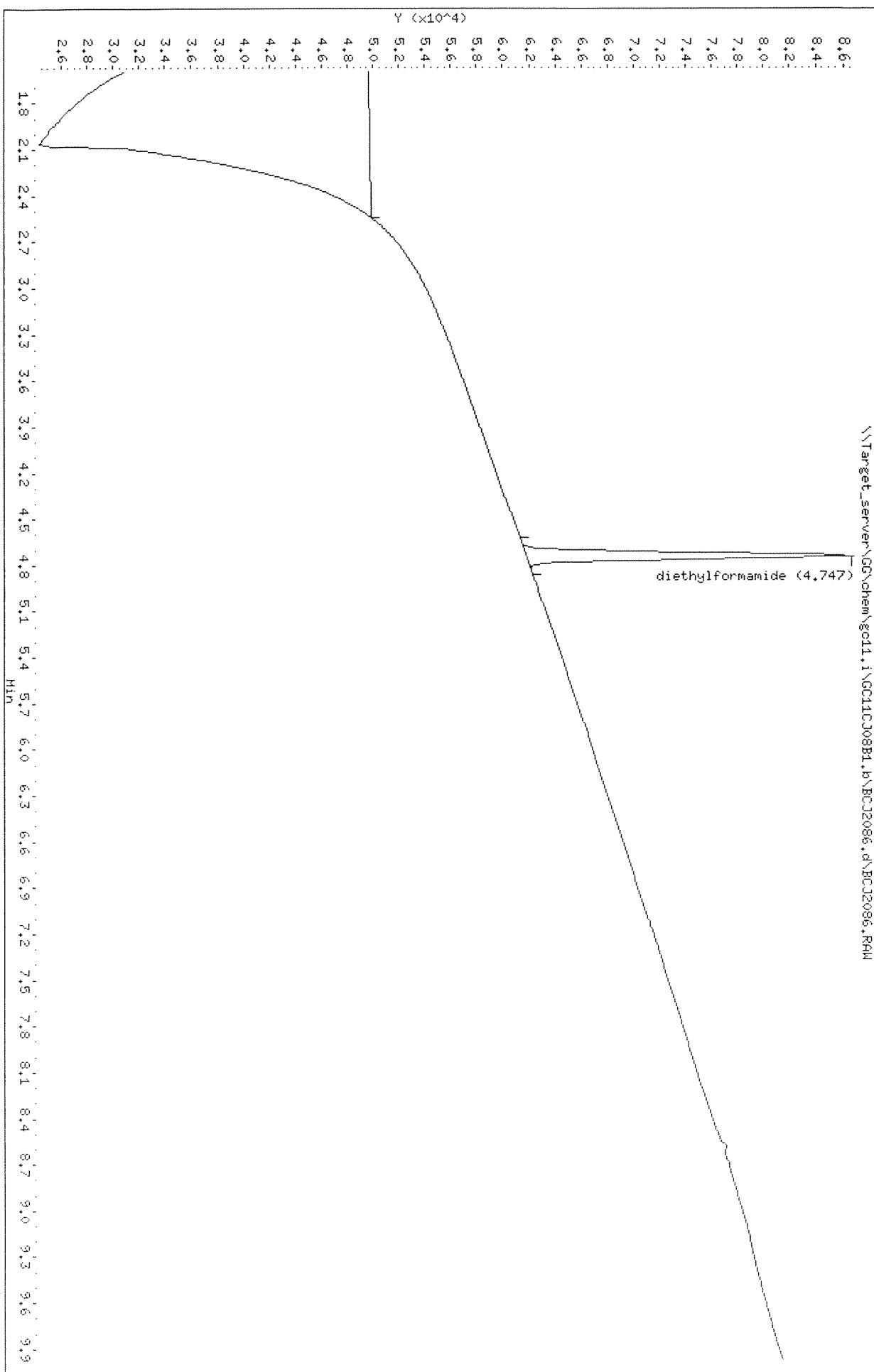
Sample Info: DMFB040A.M,GC11CJ08B1.B,1,SC5326-2  
Purge Volume: 0.0

Column phase: ZB-WAX

\\Target\_server\GC\chem\gc11.i\GC11CJ08B1.b\BCJ2086.RAW

Instrument: gc11.i  
Operator: KT  
Column diameter: 0.53

diethylformamide (4.747)



KATAHDIN ANALYTICAL SERVICES  
Report of Analytical Results

Client: Olin Corporation Lab ID: SC5326-3  
Project: Wilmington Client ID: OC-SB-466-30/32-XXX  
PO No: SDG: WIL-7  
Sample Date: 09/08/09 Extracted by: JLP  
Received Date: 09/10/09 Extraction Method: 8033M  
Extraction Date: 09/17/09 Analyst: KT  
Analysis Date: 08-OCT-2009 18:18 Analysis Method: SW846 8033M  
Report Date: 10/09/2009 Lab Prep Batch: WG68776  
Matrix: SOIL Units: mg/Kgdrwt  
% Solids: 91.2

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.60	1.0	0.80	0.60	0.60
	diethylformamide		90%				

Page 01 of 01 BCJ2087.d

Data File: \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2087.d  
Report Date: 09-Oct-2009 10:23

Katahdin Analytical Services

Data file : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2087.d  
Lab Smp Id: SC5326-3 Client Smp ID: OC-SB-466-30/32-XXX  
Inj Date : 08-OCT-2009 18:18  
Operator : KT Inst ID: gc11.i  
Smp Info : DMFB040A.M,GC11CJ08B1.B,1,SC5326-3  
Misc Info : SW846 8033M  
Comment :  
Method : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\dmfb040A.m  
Meth Date : 09-Oct-2009 10:22 jprescott Quant Type: ESTD  
Cal Date : 08-OCT-2009 13:48 Cal File: BCJ2072.d  
Als bottle: 1  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12

Concentration Formula: Amt \* DF \* (Vt/Vo)\*(100/(100-M)) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.04000	Volume of final extract (L)
Vo	0.00147	Sample Weight
M	8.828	% Moisture
Cpnd Variable		Local Compound Variable

Compounds	CONCENTRATIONS						REVIEW CODE	
	ON-COLUMN			FINAL				
	( mg/L)	(mg/Kgdrwt)	=====	=====	=====	=====		
\$ 2 diethylformamide	4.746	4.760	-0.014	80356	0.44761	13.4 (M)	M5	

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Target\_server\\GC\\chen\\gc11.i\\GC11CJ08B1.b\\BCJ2087.d  
Date : 08-OCT-2009 18:18

Client ID: 0C-SR-466-30-XXX  
Sample Info: DMFB040A.M,GC11CJ08B1.B,1,SC5326-3

Purge Volume: 0.0

Column phase: ZB-WAX

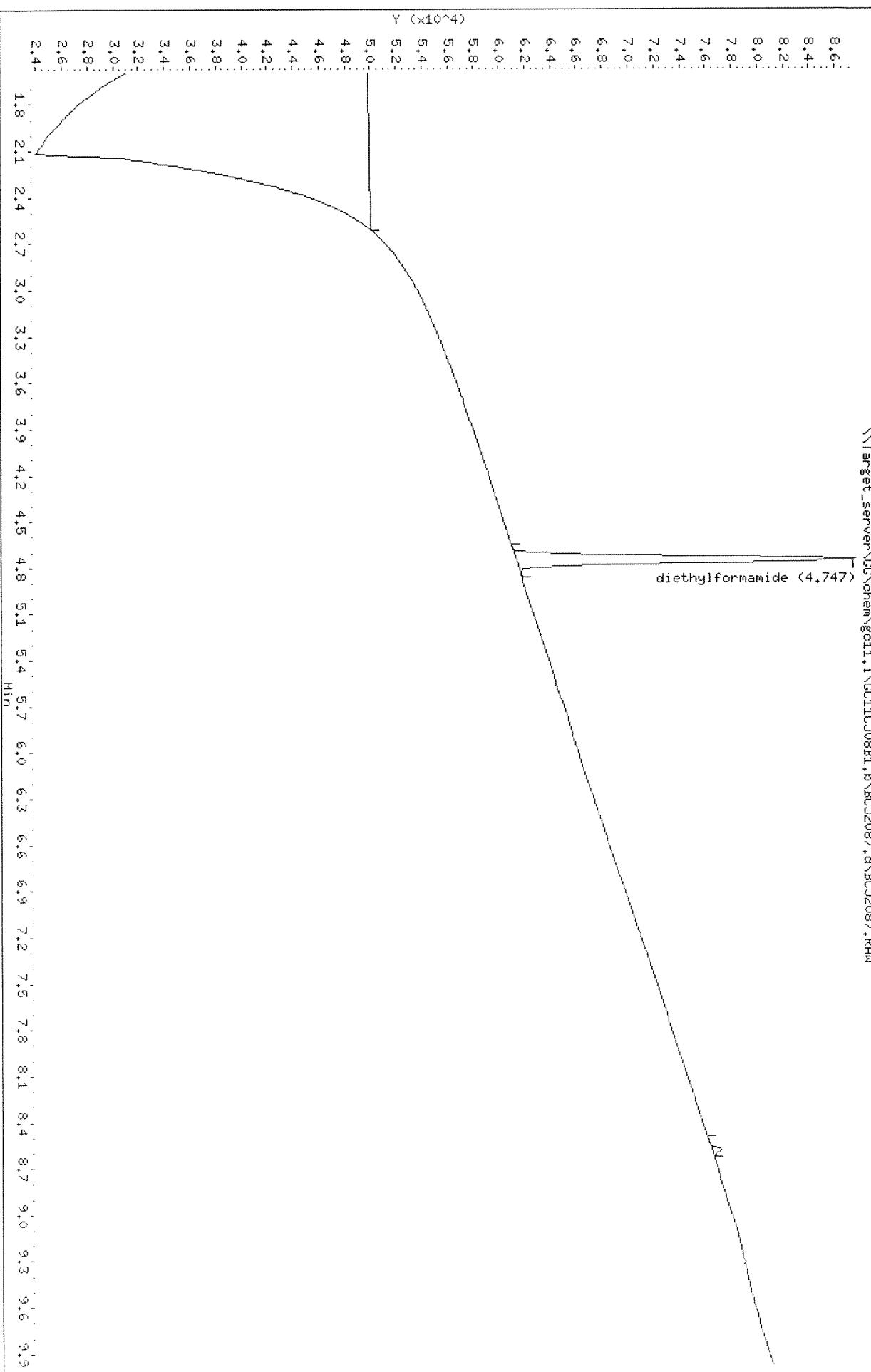
\\Target\_server\\GC\\chen\\gc11.i\\GC11CJ08B1.b\\BCJ2087.d\\BCJ2087.RAW

diethylformamide (4.747)

Instrument: gc11.i

Operator: KT

Column diameter: 0.53



KATAHDIN ANALYTICAL SERVICES  
Report of Analytical Results

Client: Olin Corporation  
Project: Wilmington  
PO No:  
Sample Date: 09/08/09  
Received Date: 09/10/09  
Extraction Date: 09/17/09  
Analysis Date: 08-OCT-2009 18:33  
Report Date: 10/09/2009  
Matrix: SOIL  
% Solids: 93.2

Lab ID: SC5326-4  
Client ID: OC-SB-466-6.0/8.0-X  
SDG: WIL-7  
Extracted by: JLP  
Extraction Method: 8033M  
Analyst: KT  
Analysis Method: SW846 8033M  
Lab Prep Batch: WG68776  
Units: mg/Kgdrwt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.61	1.0	0.80	0.61	0.61
	diethylformamide		91%				

Page 01 of 01 BCJ2088.d

Data File: \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2088.d  
Report Date: 09-Oct-2009 10:23

Katahdin Analytical Services

Data file : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2088.d  
Lab Smp Id: SC5326-4 Client Smp ID: OC-SB-466-6.0/8.0-X  
Inj Date : 08-OCT-2009 18:33  
Operator : KT Inst ID: gc11.i  
Smp Info : DMFB040A.M,GC11CJ08B1.B,1,SC5326-4  
Misc Info : SW846 8033M  
Comment :  
Method : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\dmfB040A.m  
Meth Date : 09-Oct-2009 10:22 jprescott Quant Type: ESTD  
Cal Date : 08-OCT-2009 13:48 Cal File: BCJ2072.d  
Als bottle: 1  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12

Concentration Formula: Amt \* DF \* (Vt/Vo)\*(100/(100-M)) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.04000	Volume of final extract (L)
Vo	0.00141	Sample Weight
M	6.830	% Moisture
Cpnd Variable		Local Compound Variable

Compounds	CONCENTRATIONS						REVIEW CODE
	ON-COLUMN			FINAL			
	( mg/L)	(mg/Kgdrwt)	=====	=====	=====	=====	
\$ 2 diethylformamide	RT	EXP RT	DLT RT	RESPONSE			
	4.760	4.760	0.000	81873	0.45562	13.9 (M)	MS

QC Flag Legend

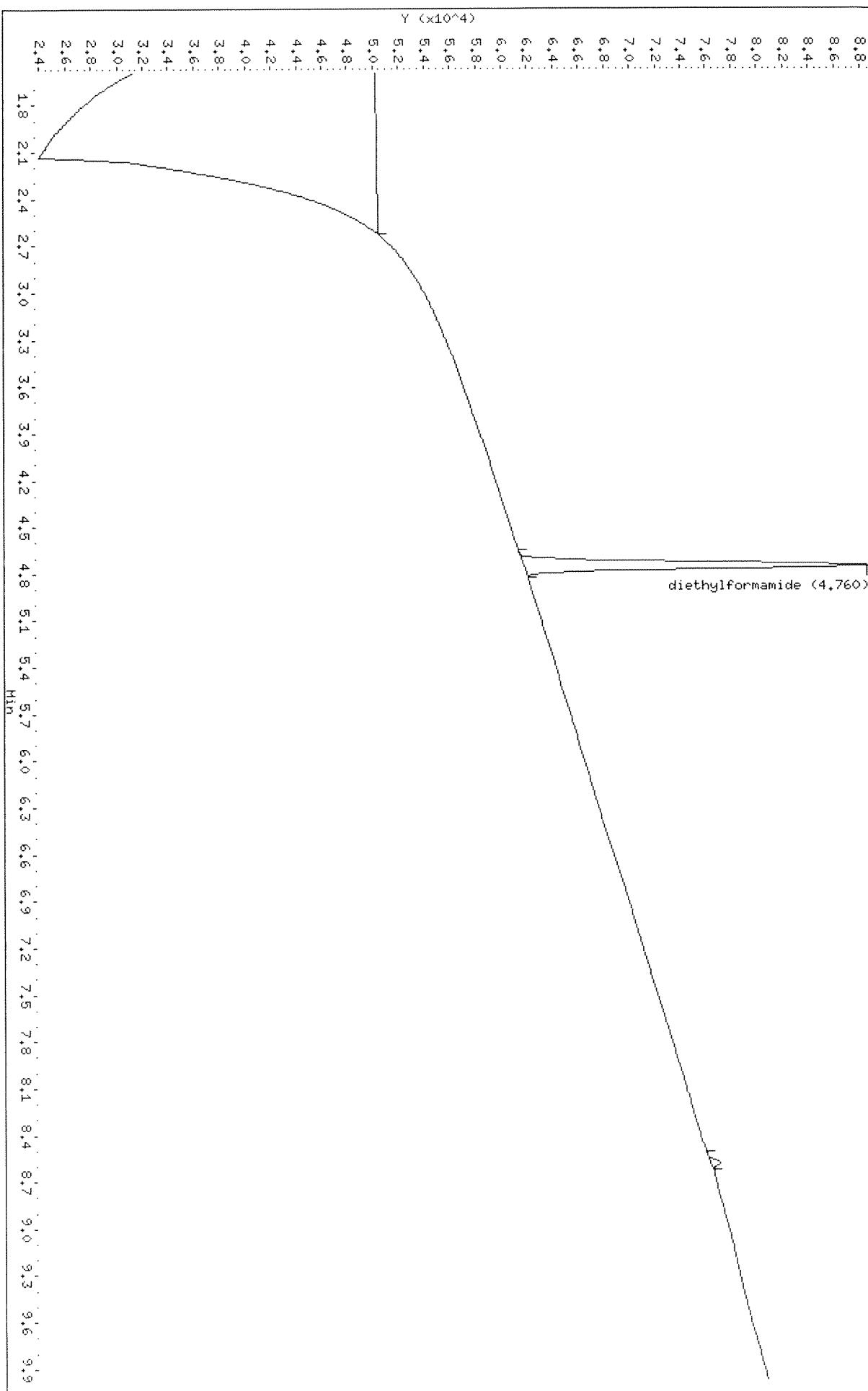
M - Compound response manually integrated.

JU  
100909

Data File: \\Target\_server\GG\chem\gc11.i\GC1CJ08B1.b\BCJ2088.d  
Date : 08-OCT-2009 18:33  
Client ID: OC-SB-466-6.0/8.0-X  
Sample Info: DMFB040A.M,GC1CJ08B1.B,1,SC5326-4  
Purge Volume: 0.0  
Column phase: ZB-HAX

Instrument: gc11.i  
Operator: KT  
Column diameter: 0.53

\\Target\_server\GG\chem\gc11.i\GC1CJ08B1.b\BCJ2088.Raw



KATAHDIN ANALYTICAL SERVICES  
Report of Analytical Results

Client: Olin Corporation  
Project: Wilmington  
PO No:  
Sample Date: 09/08/09  
Received Date: 09/10/09  
Extraction Date:  
Analysis Date: 15-SEP-2009 14:20  
Report Date: 10/09/2009  
Matrix: WATER  
% Solids: NA

Lab ID: SC5326-5RA  
Client ID: OC-EBK-008  
SDG: WIL-7  
Extracted by:  
Extraction Method: 8033M  
Analyst: JLP  
Analysis Method: SW846 M8033  
Lab Prep Batch: WG68660  
Units: mg/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.020	1.0	0.020	0.020	0.0048
	diethylformamide		106%				

Page 01 of 01 BCI4093.d

Data File: \\Target\_server\GG\chem\gc11.i\GC11CI15A1.b\BCI4093.d  
Report Date: 09-Oct-2009 10:23

Katahdin Analytical Services

Data file : \\Target\_server\GG\chem\gc11.i\GC11CI15A1.b\BCI4093.d  
Lab Smp Id: SC5326-5RA Client Smp ID: OC-EBK-008  
Inj Date : 15-SEP-2009 14:20  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB038A.M,GC11CI15A1.B,1,SC5326-5RA  
Misc Info : SW846 M8033  
Comment :  
Method : \\\TARGET\_SERVER\GG\chem\gc11.i\GC11CI15A1.B\DMFB038A.m  
Meth Date : 09-Oct-2009 10:22 jprescott Quant Type: ESTD  
Cal Date : 15-SEP-2009 11:43 Cal File: BCI4082.d  
Als bottle: 1  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12  
Processing Host: V200T2

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	FinalVolume (L)
Vo	0.00100	SampleVolume (L)
Cpnd Variable		Local Compound Variable

Compounds	CONCENTRATIONS						REVIEW CODE
	RT	EXP RT	DLT RT	RESPONSE	( mg/L)	FINAL	
\$ 2 diethylformamide	2.680	2.680	0.000	29560	0.52797	0.528 (M)	MS

QC Flag Legend

M - Compound response manually integrated.

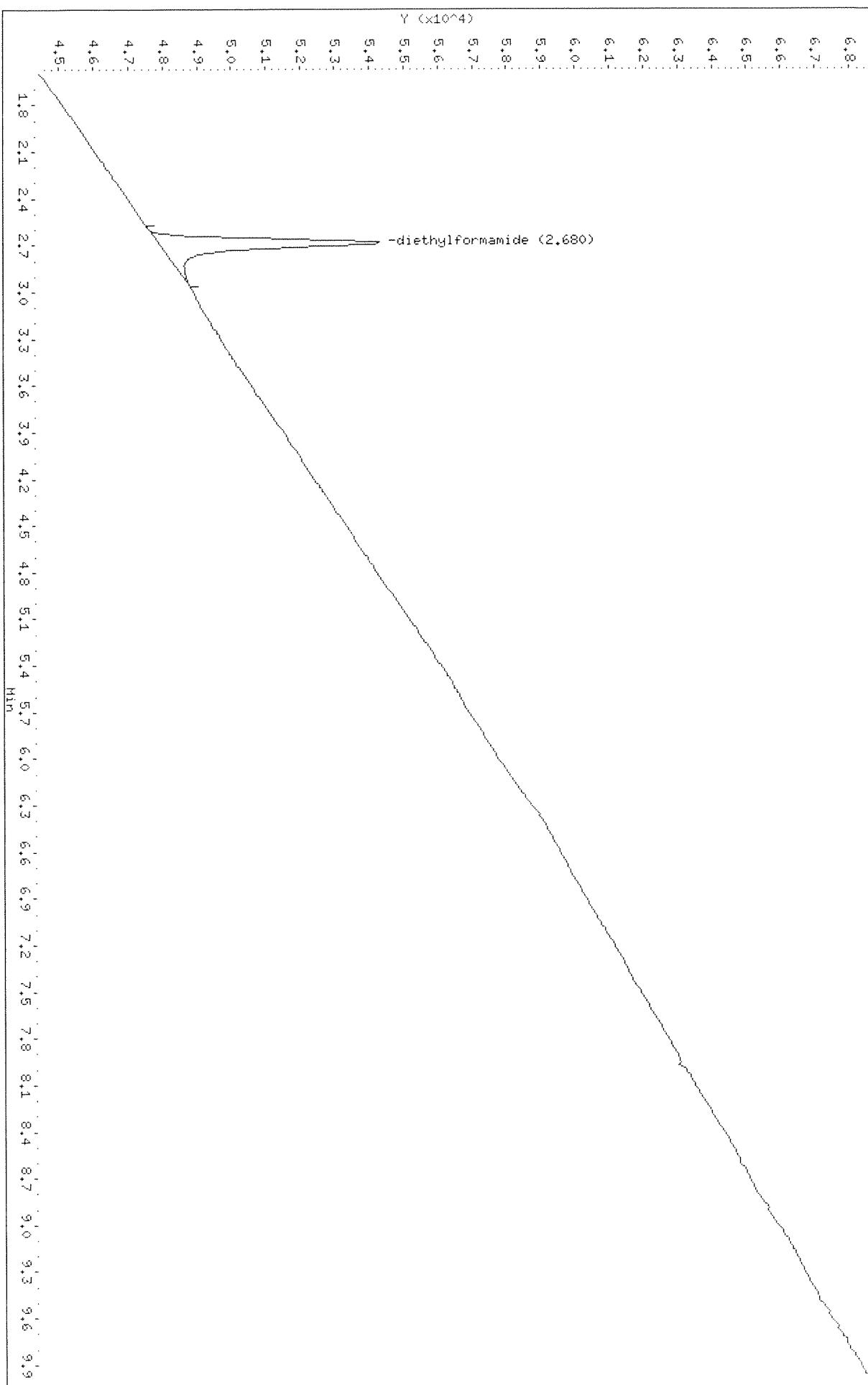
Data File: \\Target\_server\GC\chem\gc11.i\GC11C15A1.b\BC14093.d  
Date : 15-SEP-2009 14:20

Client ID: OC-ERK-008  
Sample Info: DMFB038A.M,GC11C15A1.B,1,SC5326-5RA

Purge Volume: 0.0  
Column phase: ZB-WAX

Instrument: gc11.i  
Operator: JLP  
Column diameter: 0.53

\\Target\_server\GC\chem\gc11.i\GC11C15A1.b\BC14093.RAW



KATAHDIN ANALYTICAL SERVICES  
Report of Analytical Results

Client: Olin Corporation  
Project: Wilmington  
PO No:  
Sample Date: 09/10/09  
Received Date: 09/12/09  
Extraction Date: 09/17/09  
Analysis Date: 08-OCT-2009 19:16  
Report Date: 10/09/2009  
Matrix: SOIL  
% Solids: 93.1

Lab ID: SC5415-1  
Client ID: OC-SB-427-0.0/1.0-X  
SDG: WIL-7  
Extracted by: JLP  
Extraction Method: 8033M  
Analyst: KT  
Analysis Method: SW846 8033M  
Lab Prep Batch: WG68776  
Units: mg/Kgdrwt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.57	1.0	0.80	0.57	0.57
	diethylformamide		89%				

Page 01 of 01 BCJ2091.d

Data File: \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2091.d  
Report Date: 09-Oct-2009 10:23

Katahdin Analytical Services

Data file : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2091.d  
Lab Smp Id: SC5415-1 Client Smp ID: OC-SB-427-0.0/1.0-X  
Inj Date : 08-OCT-2009 19:16  
Operator : KT Inst ID: gc11.i  
Smp Info : DMFB040A.M, GC11CJ08B1.B, 1, SC5415-1  
Misc Info : SW846 8033M  
Comment :  
Method : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\dmfB040A.m  
Meth Date : 09-Oct-2009 10:22 jprescott Quant Type: ESTD  
Cal Date : 08-OCT-2009 13:48 Cal File: BCJ2072.d  
Als bottle: 1  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12

Concentration Formula: Amt \* DF \* (Vt/Vo)\*(100/(100-M)) \* CpndVariable

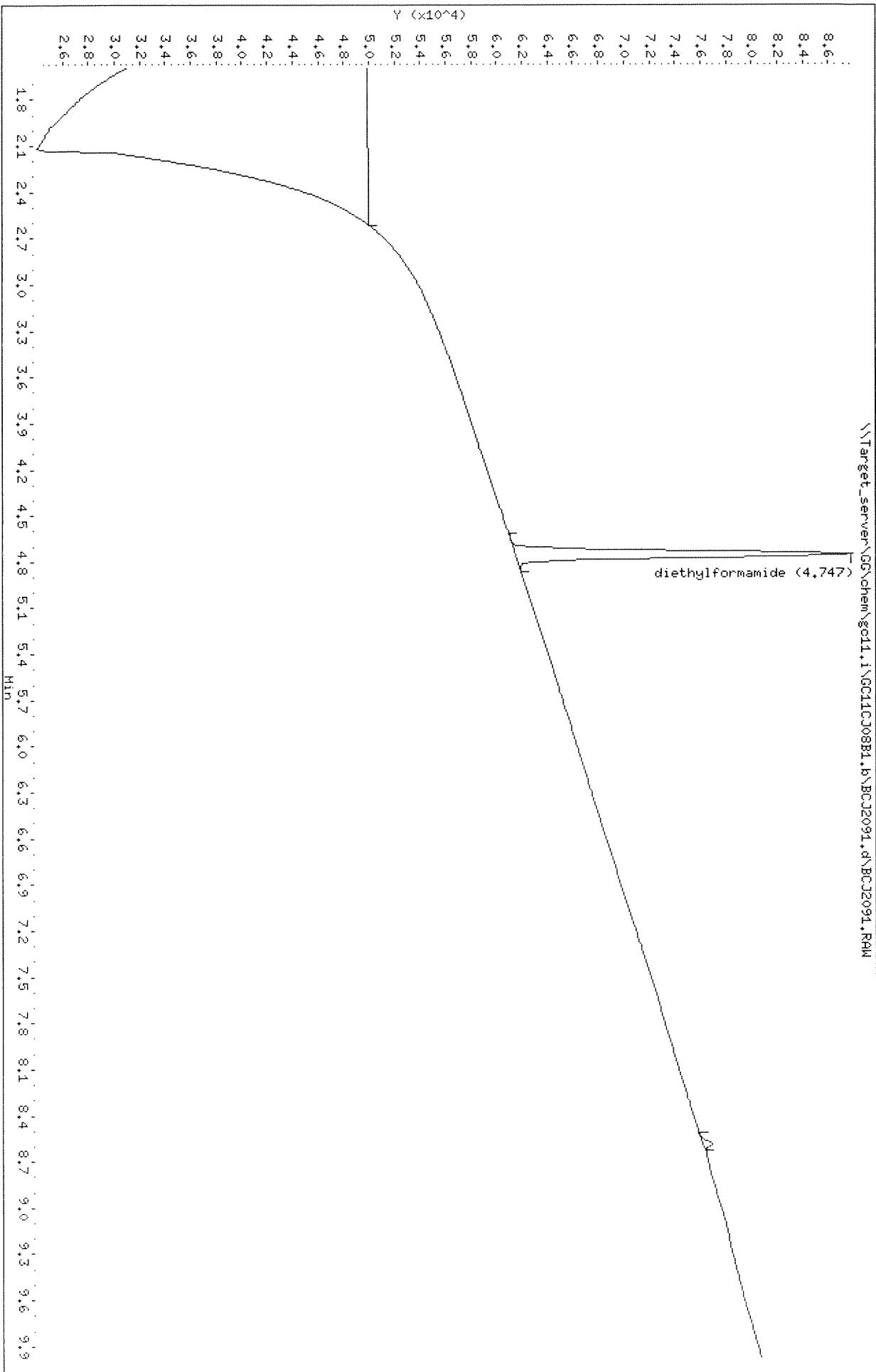
Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.04000	Volume of final extract (L)
Vo	0.00150	Sample Weight
M	6.882	% Moisture
Cpnd Variable		Local Compound Variable

Compounds	CONCENTRATIONS						REVIEW CODE
	ON-COLUMN			FINAL			
	( mg/L)	(mg/Kgdrwt)					
\$ 2 diethylformamide	RT	EXP RT	DLT RT	RESPONSE			
	4.746	4.760	-0.014	80153	0.44653	12.8 (M)	M5

QC Flag Legend

M - Compound response manually integrated.

JLP  
100905



KATAHDIN ANALYTICAL SERVICES  
Report of Analytical Results

Client: Olin Corporation  
Project: Wilmington  
PO No:  
Sample Date: 09/10/09  
Received Date: 09/12/09  
Extraction Date: 09/17/09  
Analysis Date: 08-OCT-2009 19:31  
Report Date: 10/09/2009  
Matrix: SOIL  
% Solids: 93.6

Lab ID: SC5415-2  
Client ID: OC-SB-434-0.0/1.0-X  
SDG: WIL-7  
Extracted by: JLP  
Extraction Method: 8033M  
Analyst: KT  
Analysis Method: SW846 8033M  
Lab Prep Batch: WG68776  
Units: mg/Kgdrwt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.81	1.0	0.80	0.81	0.81
	diethylformamide		88%				

Page 01 of 01 BCJ2092.d

Data File: \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2092.d  
Report Date: 09-Oct-2009 10:23

Katahdin Analytical Services

Data file : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2092.d  
Lab Smp Id: SC5415-2 Client Smp ID: OC-SB-434-0.0/1.0-X  
Inj Date : 08-OCT-2009 19:31  
Operator : KT Inst ID: gc11.i  
Smp Info : DMFB040A.M,GC11CJ08B1.B,1,SC5415-2  
Misc Info : SW846 8033M  
Comment :  
Method : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\dmfB040A.m  
Meth Date : 09-Oct-2009 10:22 jprescott Quant Type: ESTD  
Cal Date : 08-OCT-2009 13:48 Cal File: BCJ2072.d  
Als bottle: 1  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12

Concentration Formula: Amt \* DF \* (Vt/Vo)\*(100/(100-M)) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.04000	Volume of final extract (L)
Vo	0.00105	Sample Weight
M	6.354	% Moisture
Cpnd Variable		Local Compound Variable

Compounds	CONCENTRATIONS						REVIEW CODE	
	ON-COLUMN			FINAL				
	( mg/L)	(mg/Kgdrwt)	=====	=====	=====	=====		
\$ 2 diethylformamide	4.746	4.760	-0.014	78558	0.43811	17.8 (M)	M5	

QC Flag Legend

M - Compound response manually integrated.

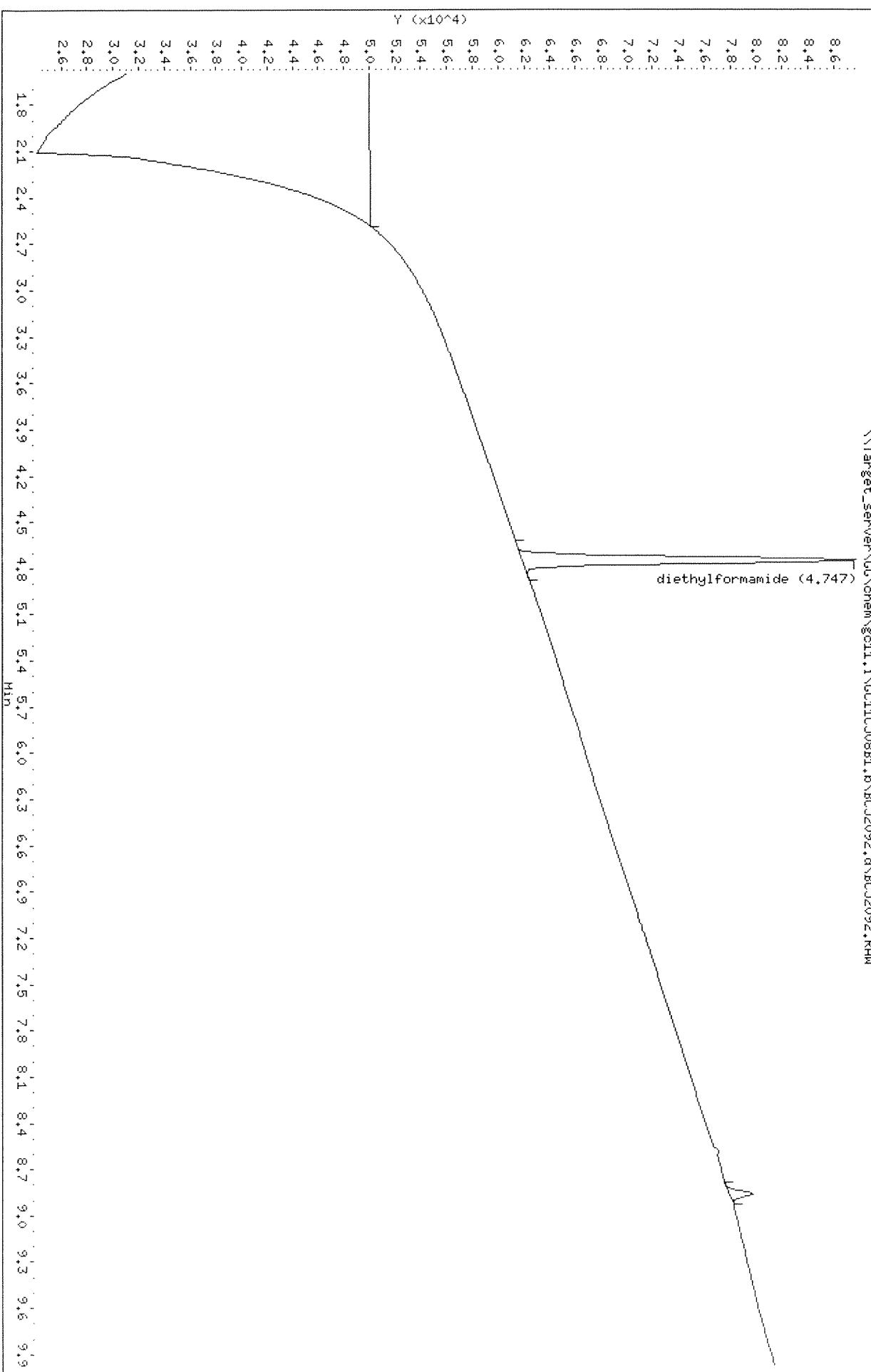
Data File: \\Target\_server\\GC\\chem\\gc11.i\\GC11CJ08B1.b\\BCJ2092.d  
Date : 08-OCT-2009 19:31  
Client ID: OC-SB-434-0.0/1.0-X

Sample Info: DMFB040A.M,GC11CJ08B1.R,1,SC5415-2  
Purge Volume: 0.0  
Column Phase: ZB-WAX

Instrument: gc11.i  
Operator: KT  
Column diameter: 0.53

\\Target\_server\\GC\\chem\\gc11.i\\GC11CJ08B1.b\\BCJ2092.RAW

diethylformamide (4.747)



KATAHDIN ANALYTICAL SERVICES  
Report of Analytical Results

Client: Olin Corporation Lab ID: SC5415-3  
Project: Wilmington Client ID: OC-SB-434-7.0/9.0-X  
PO No: SDG: WIL-7  
Sample Date: 09/10/09 Extracted by: JLP  
Received Date: 09/12/09 Extraction Method: 8033M  
Extraction Date: 09/17/09 Analyst: KT  
Analysis Date: 08-OCT-2009 19:45 Analysis Method: SW846 8033M  
Report Date: 10/09/2009 Lab Prep Batch: WG68776  
Matrix: SOIL Units: mg/Kgdrwt  
% Solids: 91.5

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.52	1.0	0.80	0.52	0.52
	diethylformamide		93%				

Page 01 of 01 BCJ2093.d

Data File: \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2093.d  
Report Date: 09-Oct-2009 10:23

Katahdin Analytical Services

Data file : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2093.d  
Lab Smp Id: SC5415-3 Client Smp ID: OC-SB-434-7.0/9.0-X  
Inj Date : 08-OCT-2009 19:45  
Operator : KT Inst ID: gc11.i  
Smp Info : DMFB040A.M,GC11CJ08B1.B,1,SC5415-3  
Misc Info : SW846 8033M  
Comment :  
Method : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\dmfB040A.m  
Meth Date : 09-Oct-2009 10:22 jprescott Quant Type: ESTD  
Cal Date : 08-OCT-2009 13:48 Cal File: BCJ2072.d  
Als bottle: 1  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12

Concentration Formula: Amt \* DF \* (Vt/Vo)\*(100/(100-M)) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.04000	Volume of final extract (L)
Vo	0.00168	Sample Weight
M	8.467	% Moisture
Cpnd Variable		Local Compound Variable

Compounds	CONCENTRATIONS						REVIEW CODE
	RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN (mg/L)	FINAL (mg/Kgdrwt)	
	====	=====	=====	=====	=====	=====	
\$ 2 diethylformamide	4.746	4.760	-0.014	83336	0.46336	12.0 (M)	M5

QC Flag Legend

M - Compound response manually integrated.

JP  
10/09/09

Data File: \\Target\_server\GC\chem\gc11.i\GC11CJ08B1.b\BCJ2093.d  
Date : 08-OCT-2009 19:45

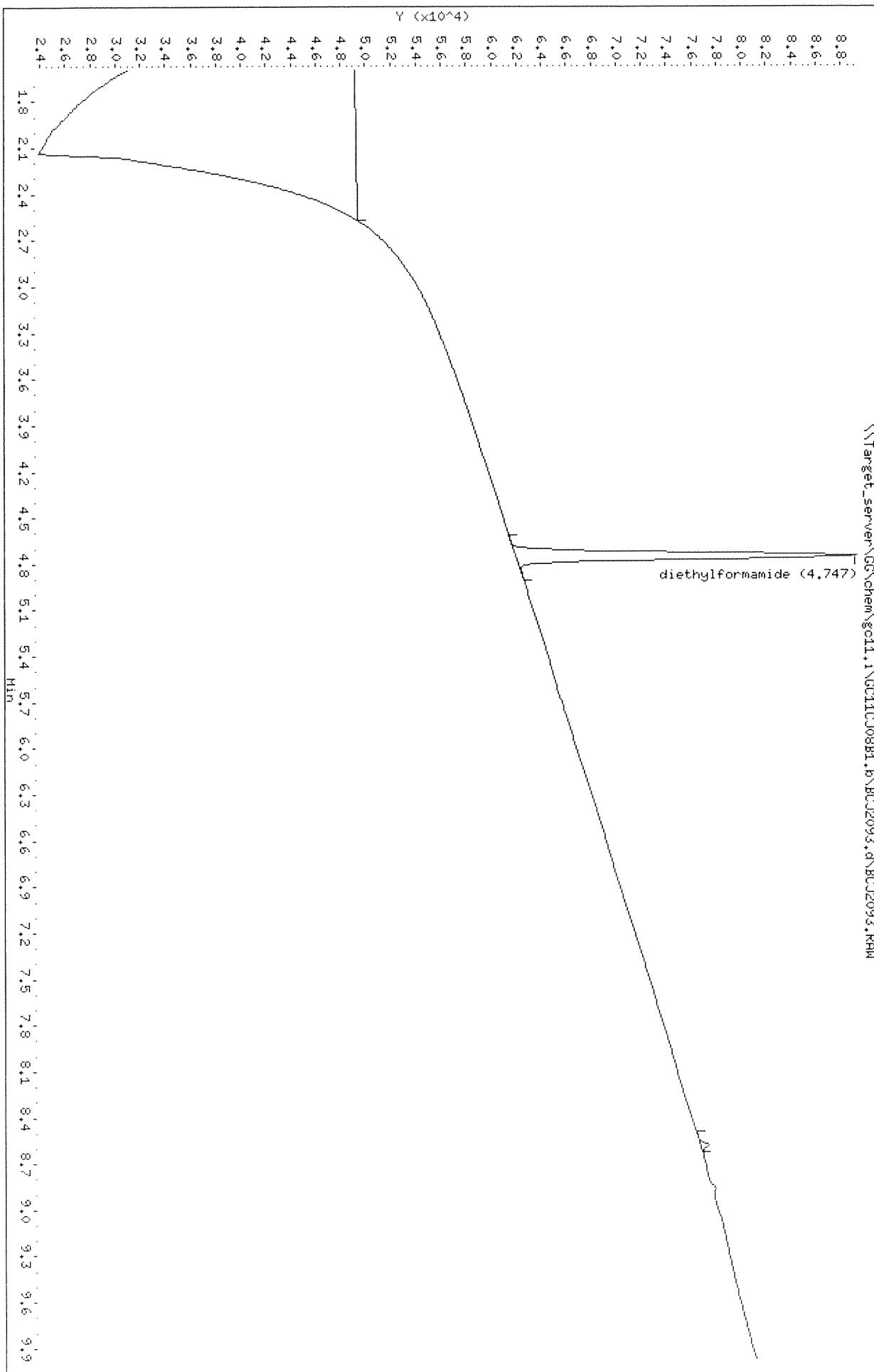
Client ID: OC-SB-434-7.0/9.0-X  
Sample Info: DMFB040A.M,GC11CJ08B1.B,1,SC5415-3  
Purge Volume: 0.0

Column phase: ZB-WAX

\\Target\_server\GC\chem\gc11.i\GC11CJ08B1.b\BCJ2093.d\BCJ2093.RAW

diethylformamide (4.747)

Instrument: gc11.i  
Operator: KT  
Column diameter: 0.53



KATAHDIN ANALYTICAL SERVICES  
Report of Analytical Results

Client: Olin Corporation  
Project: Wilmington  
PO No:  
Sample Date: 09/11/09  
Received Date: 09/12/09  
Extraction Date: 09/17/09  
Analysis Date: 08-OCT-2009 20:00  
Report Date: 10/09/2009  
Matrix: SOIL  
% Solids: 97.2

Lab ID: SC5415-4  
Client ID: OC-SB-456-0.0/1.0-X  
SDG: WIL-7  
Extracted by: JLP  
Extraction Method: 8033M  
Analyst: KT  
Analysis Method: SW846 8033M  
Lab Prep Batch: WG68776  
Units: mg/Kgdrwt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.61	1.0	0.80	0.61	0.61
	diethylformamide		82%				

Page 01 of 01 BCJ2094.d

Data File: \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2094.d  
Report Date: 09-Oct-2009 10:23

Katahdin Analytical Services

Data file : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2094.d  
Lab Smp Id: SC5415-4 Client Smp ID: OC-SB-456-0.0/1.0-X  
Inj Date : 08-OCT-2009 20:00  
Operator : KT Inst ID: gc11.i  
Smp Info : DMFB040A.M, GC11CJ08B1.B, 1, SC5415-4  
Misc Info : SW846 8033M  
Comment :  
Method : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\dmfB040A.m  
Meth Date : 09-Oct-2009 10:22 jprescott Quant Type: ESTD  
Cal Date : 08-OCT-2009 13:48 Cal File: BCJ2072.d  
Als bottle: 1  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12

Concentration Formula: Amt \* DF \* (Vt/Vo)\*(100/(100-M)) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.04000	Volume of final extract (L)
Vo	0.00134	Sample Weight
M	2.766	% Moisture
Cpnd Variable		Local Compound Variable

Compounds	CONCENTRATIONS						REVIEW CODE
	ON-COLUMN			FINAL			
	( mg/L)	(mg/Kgdrwt)					
\$ 2 diethylformamide	4.746	4.760	-0.014	73779	0.41285	12.7 (M)	M5

QC Flag Legend

M - Compound response manually integrated.

JW  
(00909)

Data File: \\Target\_server\GC\chem\gc11.i\GC11CJ08B1.b\BCJ2094.d  
Date : 08-OCT-2009 20:00

Client ID: OC-SB-456-0.0/1.0-X

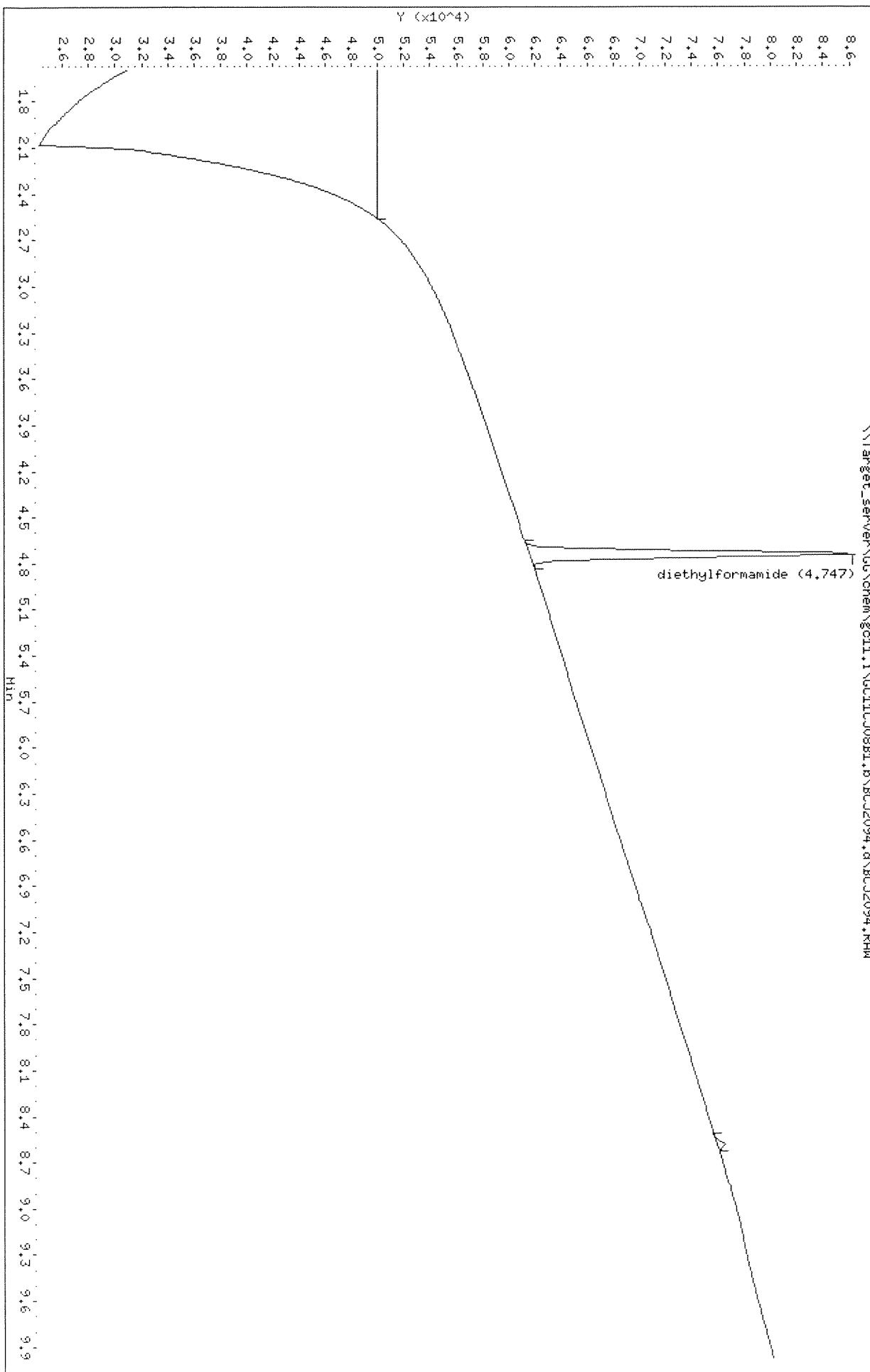
Purge Volume: 0.0

Column phase: ZB-WAX

Instrument: gc11.i  
Operator: KT  
Column diameter: 0.53

\\Target\_server\GC\chem\gc11.i\GC11CJ08B1.b\BCJ2094.d\BCJ2094.RAW

diethylformamide (4.747)



KATAHDIN ANALYTICAL SERVICES  
Report of Analytical Results

Client: Olin Corporation Lab ID: SC5415-5  
Project: Wilmington Client ID: OC-SB-456-16/18-XXX  
PO No: SDG: WIL-7  
Sample Date: 09/11/09 Extracted by: JLP  
Received Date: 09/12/09 Extraction Method: 8033M  
Extraction Date: 09/17/09 Analyst: KT  
Analysis Date: 08-OCT-2009 20:14 Analysis Method: SW846 8033M  
Report Date: 10/09/2009 Lab Prep Batch: WG68776  
Matrix: SOIL Units: mg/Kgdrwt  
% Solids: 93.1

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.50	1.0	0.80	0.50	0.50
	diethylformamide		85%				

Page 01 of 01 BCJ2095.d

Data File: \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2095.d  
Report Date: 09-Oct-2009 10:23

Katahdin Analytical Services

Data file : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2095.d  
Lab Smp Id: SC5415-5 Client Smp ID: OC-SB-456-16/18-XXX  
Inj Date : 08-OCT-2009 20:14  
Operator : KT Inst ID: gc11.i  
Smp Info : DMFB040A.M, GC11CJ08B1.B, 1, SC5415-5  
Misc Info : SW846 8033M  
Comment :  
Method : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\dmfB040A.m  
Meth Date : 09-Oct-2009 10:22 jprescott Quant Type: ESTD  
Cal Date : 08-OCT-2009 13:48 Cal File: BCJ2072.d  
Als bottle: 1  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12

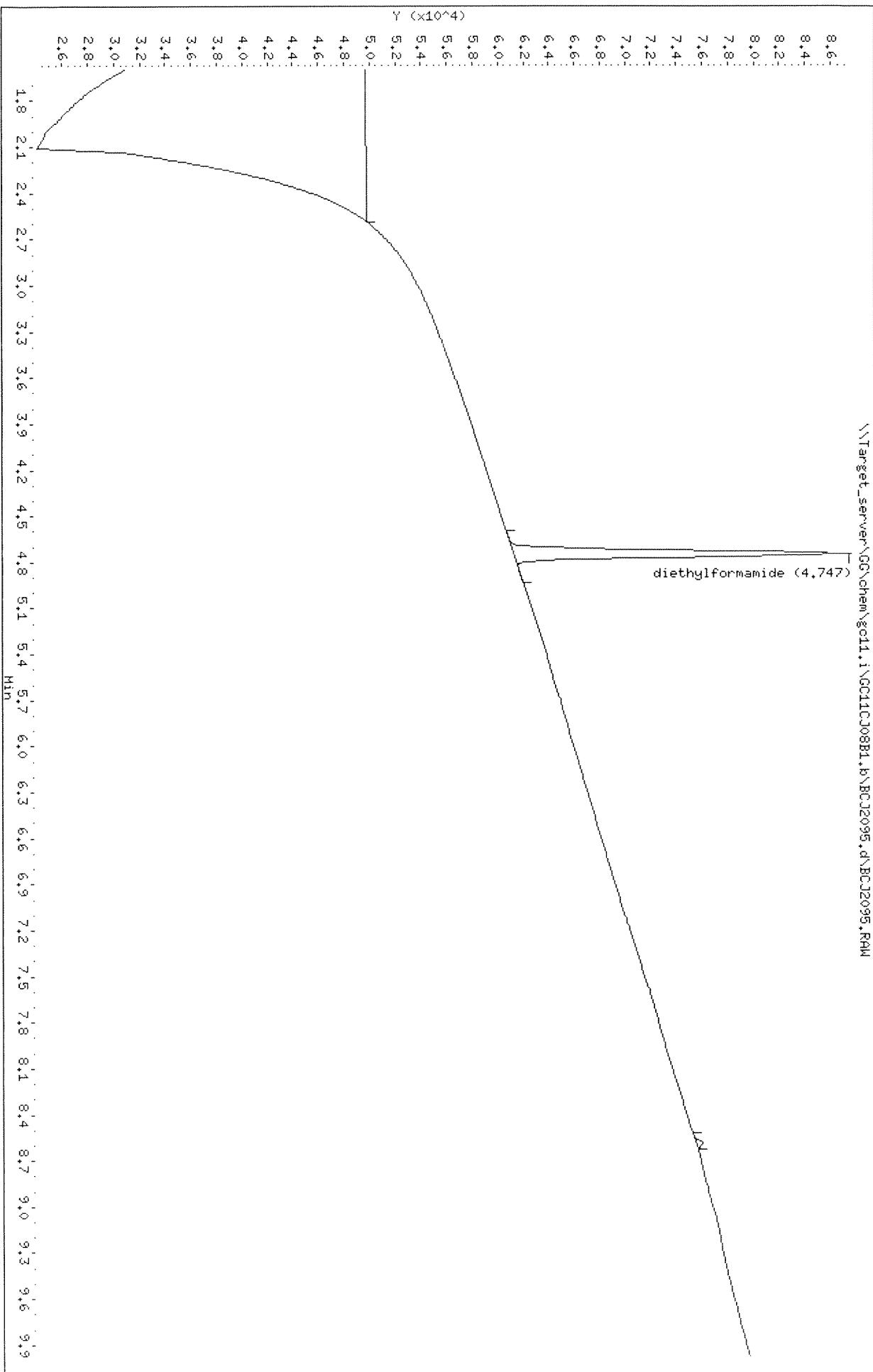
Concentration Formula: Amt \* DF \* (Vt/Vo)\*(100/(100-M)) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.04000	Volume of final extract (L)
Vo	0.00173	Sample Weight
M	6.890	% Moisture
Cpnd Variable		Local Compound Variable

Compounds	CONCENTRATIONS						REVIEW CODE
	RT	EXP RT	DLT RT	RESPONSE	( mg/L)	FINAL	
	====	=====	=====	=====	=====	=====	
\$ 2 diethylformamide	4.746	4.760	-0.014	76469	0.42707	10.6 (M)	M5

QC Flag Legend

M - Compound response manually integrated.



KATAHDIN ANALYTICAL SERVICES  
Report of Analytical Results

Client: Olin Corporation Lab ID: SC5415-6  
Project: Wilmington Client ID: OC-SB-456-7.0/9.0-D  
PO No: SDG: WIL-7  
Sample Date: 09/11/09 Extracted by: JLP  
Received Date: 09/12/09 Extraction Method: 8033M  
Extraction Date: 09/17/09 Analyst: KT  
Analysis Date: 08-OCT-2009 20:29 Analysis Method: SW846 8033M  
Report Date: 10/09/2009 Lab Prep Batch: WG68776  
Matrix: SOIL Units: mg/Kgdrwt  
% Solids: 94.3

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.70	1.0	0.80	0.70	0.70
	diethylformamide		87%				

Page 01 of 01 BCJ2096.d

Data File: \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2096.d  
Report Date: 09-Oct-2009 10:23

Katahdin Analytical Services

Data file : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2096.d  
Lab Smp Id: SC5415-6 Client Smp ID: OC-SB-456-7.0/9.0-D  
Inj Date : 08-OCT-2009 20:29  
Operator : KT Inst ID: gc11.i  
Smp Info : DMFB040A.M,GC11CJ08B1.B,1,SC5415-6  
Misc Info : SW846 8033M  
Comment :  
Method : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\dmfB040A.m  
Meth Date : 09-Oct-2009 10:22 jprescott Quant Type: ESTD  
Cal Date : 08-OCT-2009 13:48 Cal File: BCJ2072.d  
Als bottle: 1  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12

Concentration Formula: Amt \* DF \* (Vt/Vo)\*(100/(100-M)) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.04000	Volume of final extract (L)
Vo	0.00122	Sample Weight
M	5.658	% Moisture
Cpnd Variable		Local Compound Variable

Compounds	CONCENTRATIONS						REVIEW CODE	
	ON-COLUMN			FINAL				
	( mg/L)	(mg/Kgdrwt)	=====	=====	=====	=====		
\$ 2 diethylformamide	4.746	4.760	-0.014	77752	0.43385	15.1 (M)	M5	

QC Flag Legend

M - Compound response manually integrated.

JP  
100909

Data File: \\Target\_server\GC\chem\gc11.i\GC1CJ08B1.b\BCJ2096.d

Date : 08-OCT-2009 20:29

Client ID: 0C-3B-456-7/0/9.0-D

Sample Info: DMFB040A.M,GC1CJ08B1.B,1,SC5415-6

Purge Volume: 0.0

Column Phase: ZB-WAX

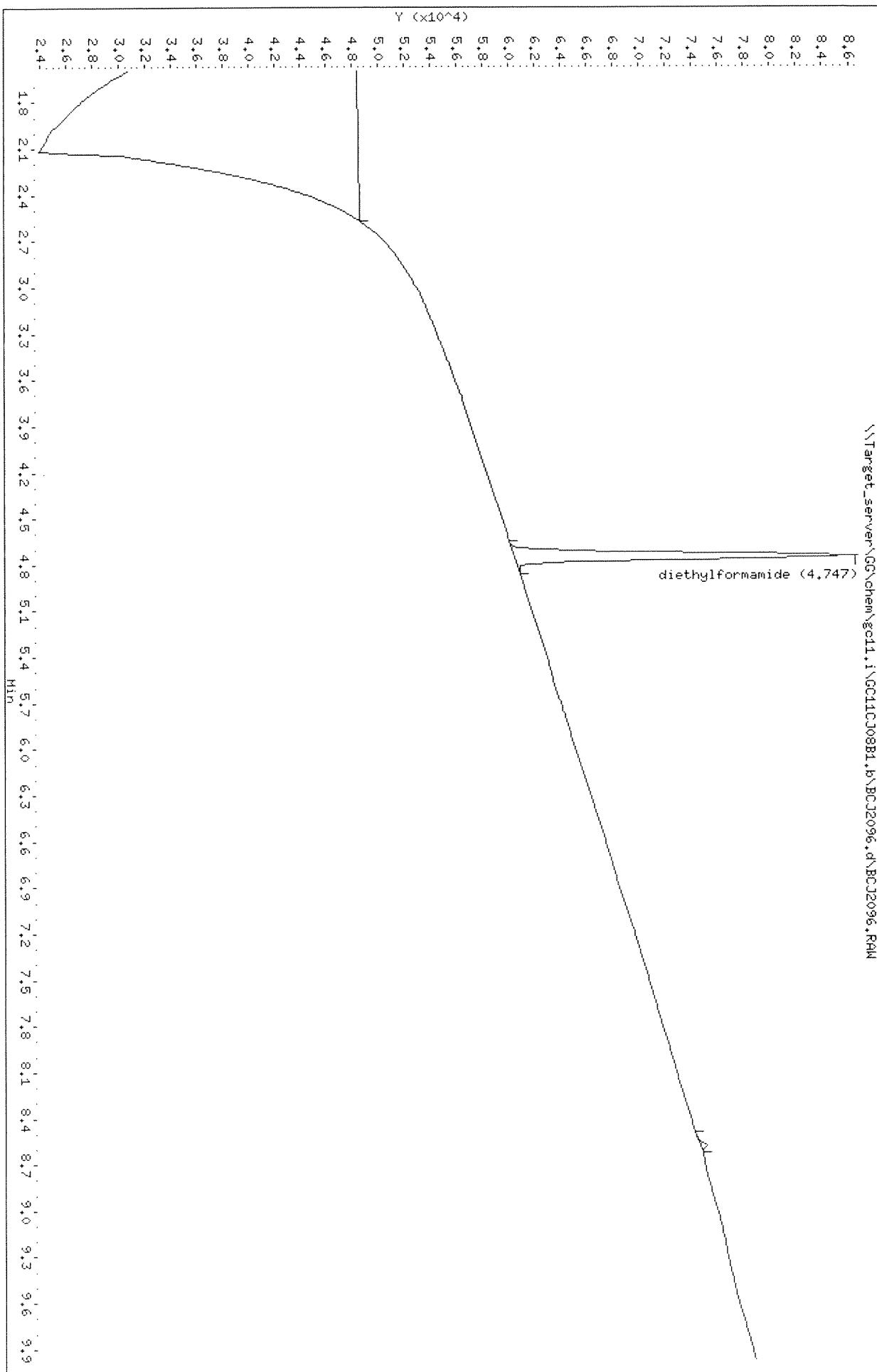
\\Target\_server\GC\chem\gc11.i\GC1CJ08B1.b\BCJ2096.d\BCJ2096.RAW

diethylformamide (4,747)

Instrument: gc11.i

Operator: KT

Column diameter: 0.53



KATAHDIN ANALYTICAL SERVICES  
Report of Analytical Results

Client: Olin Corporation Lab ID: SC5415-7  
Project: Wilmington Client ID: SB-456-7.0/9.0-X  
PO No: SDG: WIL-7  
Sample Date: 09/11/09 Extracted by: JLP  
Received Date: 09/12/09 Extraction Method: 8033M  
Extraction Date: 09/17/09 Analyst: KT  
Analysis Date: 08-OCT-2009 20:43 Analysis Method: SW846 8033M  
Report Date: 10/09/2009 Lab Prep Batch: WG68776  
Matrix: SOIL Units: mg/Kgdrwt  
% Solids: 92.0

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.60	1.0	0.80	0.60	0.60
	diethylformamide		88%				

Page 01 of 01 BCJ2097.d

Data File: \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2097.d  
Report Date: 09-Oct-2009 10:23

Katahdin Analytical Services

Data file : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2097.d  
Lab Smp Id: SC5415-7 Client Smp ID: SB-456-7.0/9.0-X  
Inj Date : 08-OCT-2009 20:43  
Operator : KT Inst ID: gc11.i  
Smp Info : DMFB040A.M,GC11CJ08B1.B,1,SC5415-7  
Misc Info : SW846 8033M  
Comment :  
Method : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\dmfB040A.m  
Meth Date : 09-Oct-2009 10:22 jprescott Quant Type: ESTD  
Cal Date : 08-OCT-2009 13:48 Cal File: BCJ2072.d  
Als bottle: 1  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12

Concentration Formula: Amt \* DF \* (Vt/Vo)\*(100/(100-M)) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.04000	Volume of final extract (L)
Vo	0.00144	Sample Weight
M	7.978	% Moisture
Cpnd Variable		Local Compound Variable

Compounds	CONCENTRATIONS						REVIEW CODE
	ON-COLUMN			FINAL			
	( mg/L)	(mg/Kgdrwt)	=====	=====	=====	=====	
\$ 2 diethylformamide	4.746	4.760	-0.014	78770	0.43923	13.2 (M)	M5

QC Flag Legend

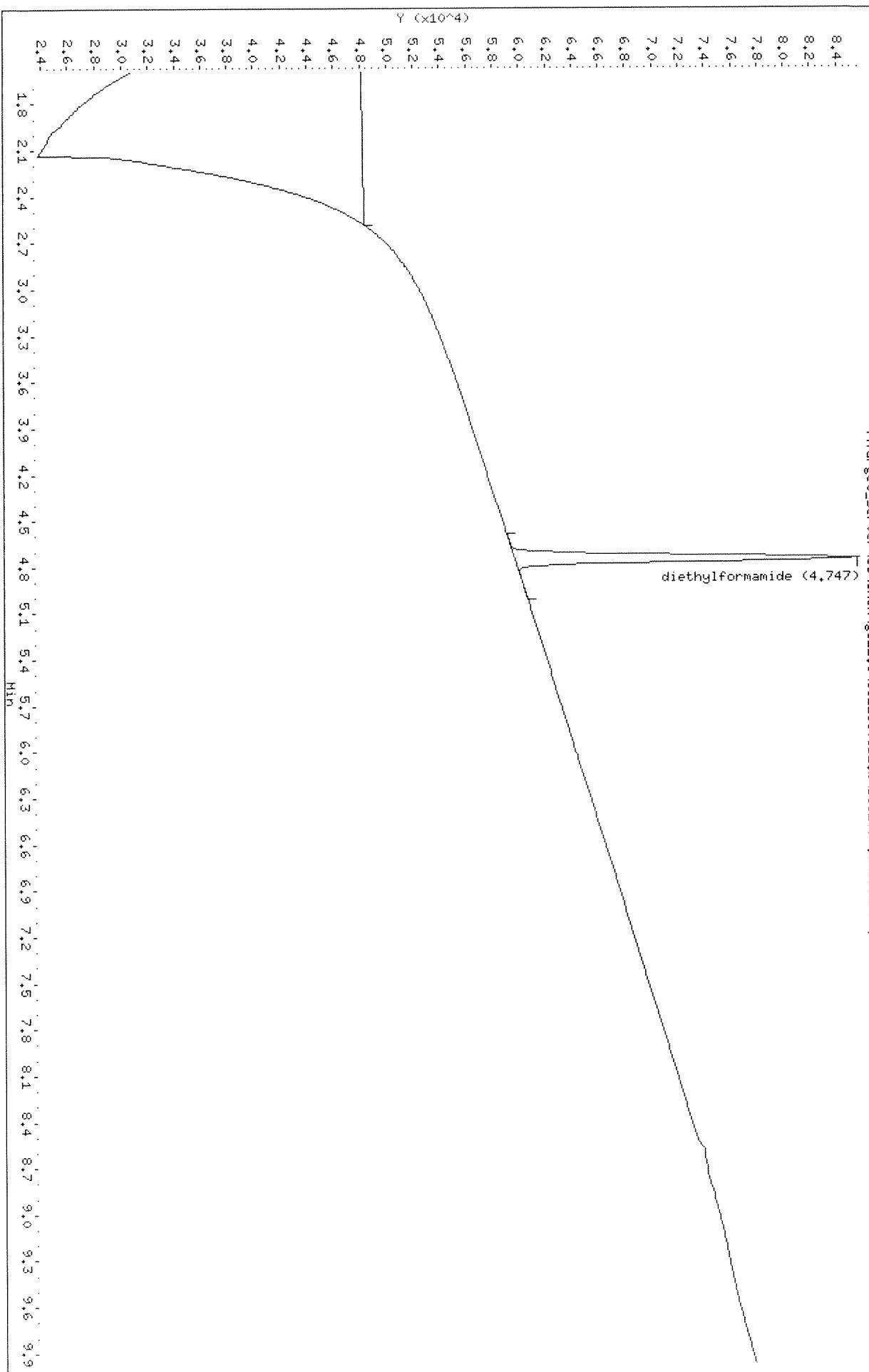
M - Compound response manually integrated.

JTF  
100909

Data File: \\Target\_server\GG\chem\gc11.i\GC1CJ08B1.b\BCJ2097.d  
Date : 08-OCT-2009 20:43  
Client ID: SB-486-7,0/94-X  
Sample Info: DMFB040A.M,GC1CJ08B1.B,1,SC5415-7  
Purge Volume: 0.0  
Column Phase: ZB-WAX

Instrument: gc11.i  
Operator: KT  
Column diameter: 0.53

\\Target\_server\GG\chem\gc11.i\GC1CJ08B1.b\BCJ2097.RAW



KATAHDIN ANALYTICAL SERVICES  
Report of Analytical Results

Client: Olin Corporation  
Project: Wilmington  
PO No:  
Sample Date: 09/11/09  
Received Date: 09/12/09  
Extraction Date: 09/17/09  
Analysis Date: 08-OCT-2009 20:57  
Report Date: 10/09/2009  
Matrix: SOIL  
% Solids: 94.9

Lab ID: SC5415-8  
Client ID: OC-SB-457-0.0/1.0-X  
SDG: WIL-7  
Extracted by: JLP  
Extraction Method: 8033M  
Analyst: KT  
Analysis Method: SW846 8033M  
Lab Prep Batch: WG68776  
Units: mg/Kgdrwt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.68	1.0	0.80	0.68	0.68
	diethylformamide		86%				

Page 01 of 01 BCJ2098.d

Data File: \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2098.d  
Report Date: 09-Oct-2009 10:23

Katahdin Analytical Services

Data file : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2098.d  
Lab Smp Id: SC5415-8 Client Smp ID: OC-SB-457-0.0/1.0-X  
Inj Date : 08-OCT-2009 20:57  
Operator : KT Inst ID: gc11.i  
Smp Info : DMFB040A.M,GC11CJ08B1.B,1,SC5415-8  
Misc Info : SW846 8033M  
Comment :  
Method : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\dmfB040A.m  
Meth Date : 09-Oct-2009 10:22 jprescott Quant Type: ESTD  
Cal Date : 08-OCT-2009 13:48 Cal File: BCJ2072.d  
Als bottle: 1  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12

Concentration Formula: Amt \* DF \* (Vt/Vo)\*(100/(100-M)) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.04000	Volume of final extract (L)
Vo	0.00123	Sample Weight
M	5.057	% Moisture
Cpnd Variable		Local Compound Variable

Compounds	CONCENTRATIONS						REVIEW CODE
	RT	EXP RT	DLT RT	RESPONSE	( mg/L)	(mg/Kgdrwt)	
\$ 2 diethylformamide	4.746	4.760	-0.014	76798	0.42880	14.7 (M)	M5

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Target\_server\GC\chem\gc11.i\GC11CJ08B1.b\BCJ2098.d

Date : 08-OCT-2008 20:57

Client ID: 0C-SB-457-0.0/1.0-X

Sample Info: DMFB040A.H,GC11CJ08B1.B,1,SC5415-8

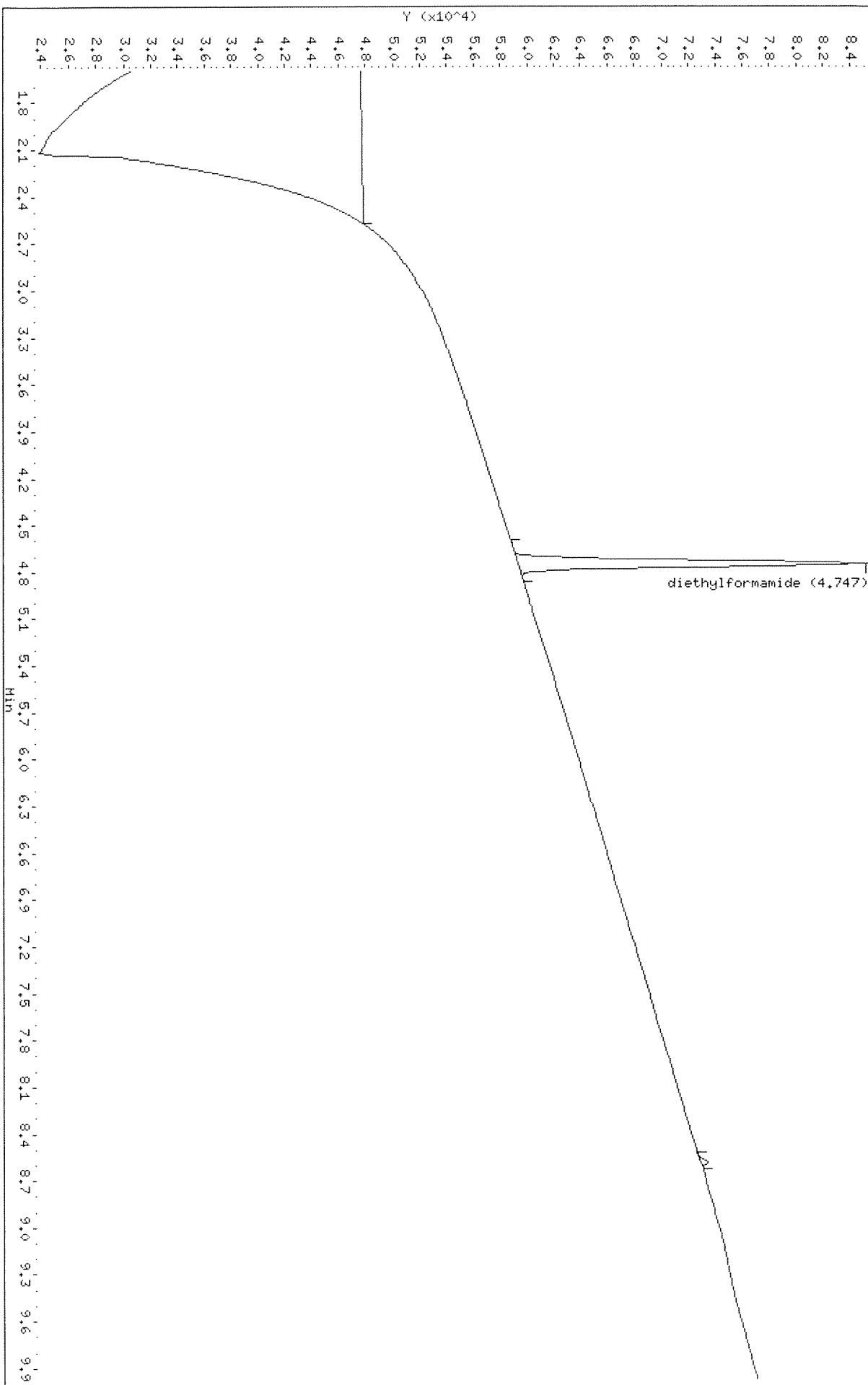
Purge Volume: 0.0

Column Phase: ZB-WAX

\\Target\_server\GC\chem\gc11.i\GC11CJ08B1.b\BCJ2098.d\BCJ2098.RAW

Instrument: gc11.i  
Operator: KT  
Column diameter: 0.53

diethylformamide (4.747)



KATAHDIN ANALYTICAL SERVICES  
Report of Analytical Results

Client: Olin Corporation Lab ID: SC5415-9  
Project: Wilmington Client ID: OC-SB-457-8.0/10-XX  
PO No: SDG: WIL-7  
Sample Date: 09/11/09 Extracted by: JLP  
Received Date: 09/12/09 Extraction Method: 8033M  
Extraction Date: 09/17/09 Analyst: KT  
Analysis Date: 08-OCT-2009 21:12 Analysis Method: SW846 8033M  
Report Date: 10/09/2009 Lab Prep Batch: WG68776  
Matrix: SOIL Units: mg/Kgdrwt  
% Solids: 93.7

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.52	1.0	0.80	0.52	0.52
	diethylformamide		84%				

Page 01 of 01 BCJ2099.d

Data File: \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2099.d  
Report Date: 09-Oct-2009 10:23

Katahdin Analytical Services

Data file : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2099.d  
Lab Smp Id: SC5415-9 Client Smp ID: OC-SB-457-8.0/10-XX  
Inj Date : 08-OCT-2009 21:12  
Operator : KT Inst ID: gc11.i  
Smp Info : DMFB040A.M,GC11CJ08B1.B,1,SC5415-9  
Misc Info : SW846 8033M  
Comment :  
Method : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\dmfB040A.m  
Meth Date : 09-Oct-2009 10:22 jprescott Quant Type: ESTD  
Cal Date : 08-OCT-2009 13:48 Cal File: BCJ2072.d  
Als bottle: 1  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12

Concentration Formula: Amt \* DF \* (Vt/Vo)\*(100/(100-M)) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.04000	Volume of final extract (L)
Vo	0.00165	Sample Weight
M	6.329	% Moisture
Cpnd Variable		Local Compound Variable

Compounds	CONCENTRATIONS						REVIEW CODE
	ON-COLUMN			FINAL			
	( mg/L)	(mg/Kgdrwt)	=====	=====	=====	=====	
\$ 2 diethylformamide	4.746	4.760	-0.014	75052	0.41958	10.8 (M)	M5

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2099.d

Date : 08-OCT-2009 21:12

Client ID: OC-SB-457-8-0/10-XX

Sample Info: DMFF040A.M,GC11CJ08B1.B,1,SC5415-9

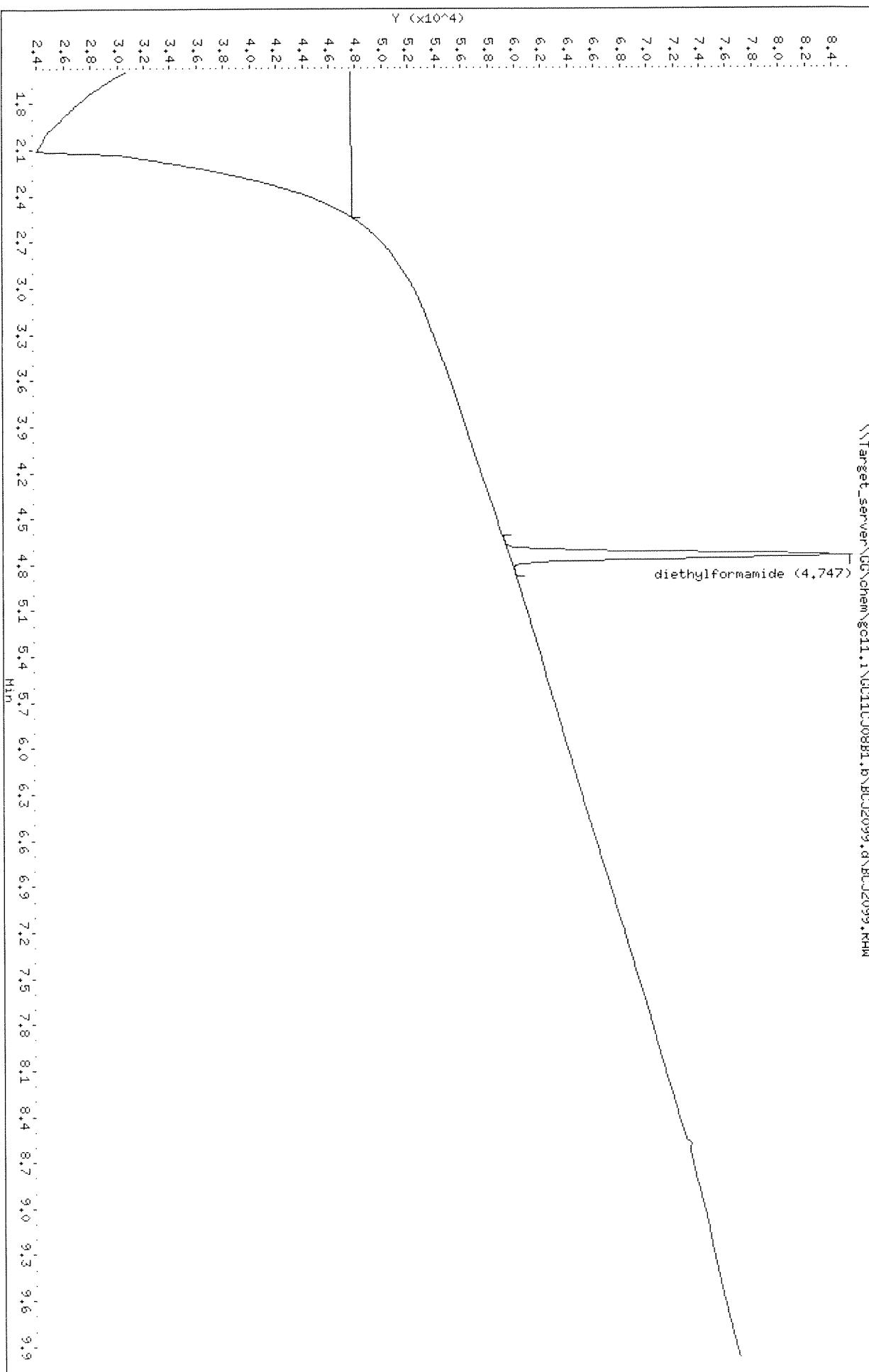
Purge Volume: 0.0

Column phase: ZB-WAX

\\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2099.d\BCJ2099.RAW

diethylformamide (4.747)

Instrument: gc11.i  
Operator: KT  
Column diameter: 0.53



KATAHDIN ANALYTICAL SERVICES  
Report of Analytical Results

Client: Olin Corporation Lab ID: SC5605-1  
Project: Wilmington Client ID: OC-SB-413-0.0/1.0-X  
PO No: SDG: WIL-7  
Sample Date: 09/17/09 Extracted by: JLP  
Received Date: 09/19/09 Extraction Method: 8033M  
Extraction Date: 09/23/09 Analyst: KT  
Analysis Date: 08-OCT-2009 23:08 Analysis Method: SW846 8033M  
Report Date: 10/09/2009 Lab Prep Batch: WG68986  
Matrix: SOIL Units: mg/Kgdrwt  
% Solids: 73.2

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.79	1.0	0.80	0.79	0.79
	diethylformamide		72%				

Page 01 of 01 BCJ2107.d

Data File: \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2107.d  
Report Date: 09-Oct-2009 10:23

Katahdin Analytical Services

Data file : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2107.d  
Lab Smp Id: SC5605-1 Client Smp ID: OC-SB-413-0.0/1.0-X  
Inj Date : 08-OCT-2009 23:08  
Operator : KT Inst ID: gc11.i  
Smp Info : DMFB040A.M,GC11CJ08B1.B,1,SC5605-1  
Misc Info : SW846 8033M  
Comment :  
Method : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\dmfB040A.m  
Meth Date : 09-Oct-2009 10:22 jprescott Quant Type: ESTD  
Cal Date : 08-OCT-2009 13:48 Cal File: BCJ2072.d  
Als bottle: 1  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12

Concentration Formula: Amt \* DF \* (Vt/Vo)\*(100/(100-M)) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.04000	Volume of final extract (L)
Vo	0.00138	Sample Weight
M	26.771	% Moisture
Cpnd Variable		Local Compound Variable

Compounds	CONCENTRATIONS						REVIEW CODE	
	ON-COLUMN			FINAL				
	( mg/L)	(mg/Kgdrwt)	=====	=====	=====	=====		
\$ 2 diethylformamide	4.746	4.760	-0.014	63590	0.35901	14.2	=====	

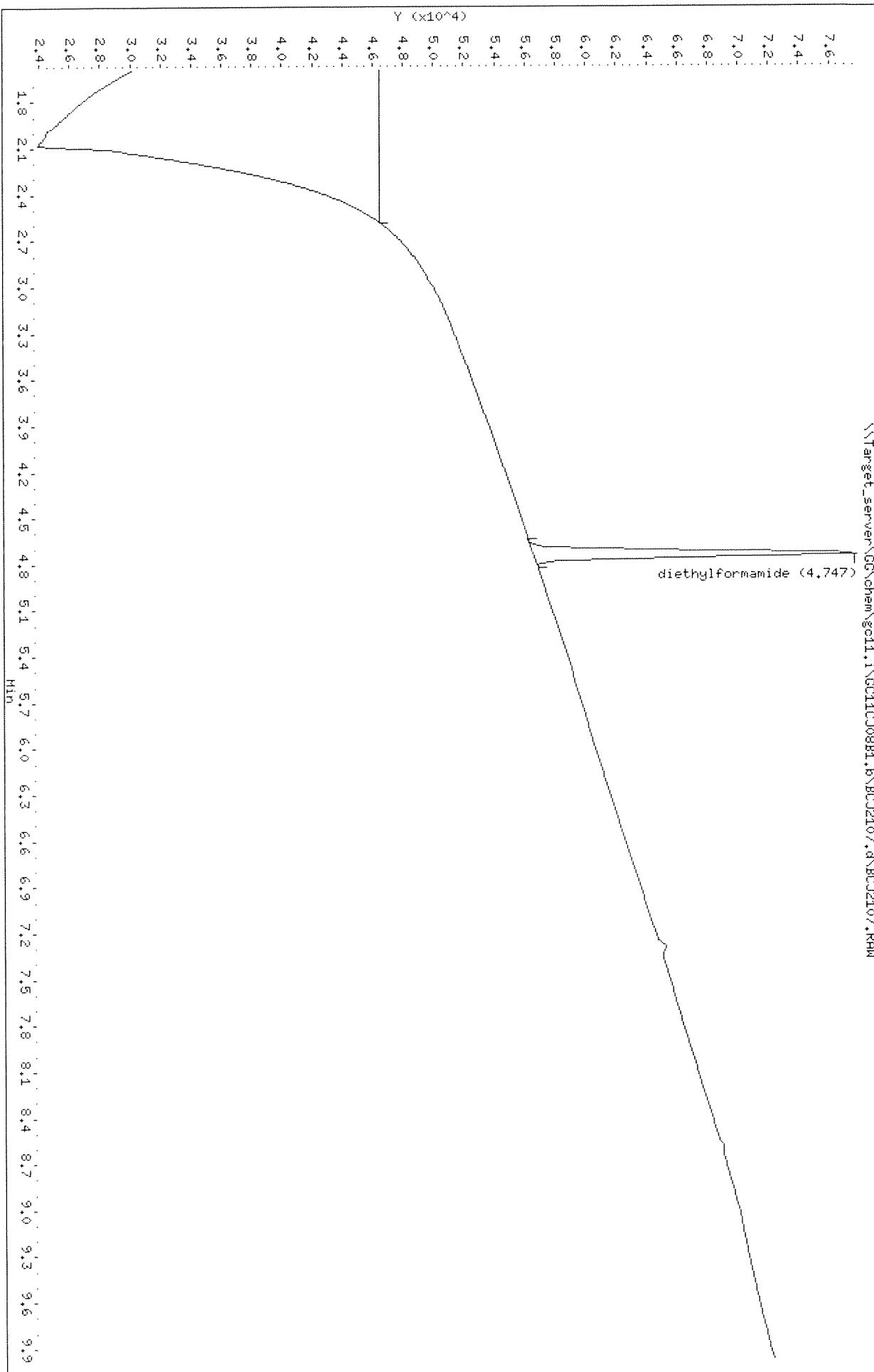
Data File: \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2107.d  
Date : 08-OCT-2009 23:08  
Client ID: OC-SB-413-0-0-1-0-X  
Sample Info: DMFB040A.M,GC11CJ08B1.B,1,SC5605-1  
Purge Volume: 0.0

Column Phase: ZB-WAX

Instrument: gc11.i  
Operator: KT  
Column diameter: 0.53

\\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2107.RAW

diethylformamide (4.747)



KATAHDIN ANALYTICAL SERVICES  
Report of Analytical Results

Client: Olin Corporation Lab ID: SC5605-2  
Project: Wilmington Client ID: OC-SB-413-1.0/5.0-X  
PO No: SDG: WIL-7  
Sample Date: 09/17/09 Extracted by: JLP  
Received Date: 09/19/09 Extraction Method: 8033M  
Extraction Date: 09/23/09 Analyst: KT  
Analysis Date: 08-OCT-2009 23:23 Analysis Method: SW846 8033M  
Report Date: 10/09/2009 Lab Prep Batch: WG68986  
Matrix: SOIL Units: mg/Kgdrwt  
% Solids: 88.6

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.77	1.0	0.80	0.77	0.77
	diethylformamide		75%				

Page 01 of 01 BCJ2108.d

Data File: \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2108.d  
Report Date: 09-Oct-2009 10:23

Katahdin Analytical Services

Data file : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2108.d  
Lab Smp Id: SC5605-2 Client Smp ID: OC-SB-413-1.0/5.0-X  
Inj Date : 08-OCT-2009 23:23  
Operator : KT Inst ID: gc11.i  
Smp Info : DMFB040A.M,GC11CJ08B1.B,1,SC5605-2  
Misc Info : SW846 8033M  
Comment :  
Method : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\dmfb040A.m  
Meth Date : 09-Oct-2009 10:22 jprescott Quant Type: ESTD  
Cal Date : 08-OCT-2009 13:48 Cal File: BCJ2072.d  
Als bottle: 1  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12

Concentration Formula: Amt \* DF \* (Vt/Vo)\*(100/(100-M)) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.04000	Volume of final extract (L)
Vo	0.00117	Sample Weight
M	11.444	% Moisture
Cpnd Variable		Local Compound Variable

Compounds	CONCENTRATIONS						REVIEW CODE	
	ON-COLUMN			FINAL				
	( mg/L)	(mg/Kgdrwt)	=====	=====	=====	=====		
\$ 2 diethylformamide	4.746	4.760	-0.014	66350	0.37359	14.4	=====	

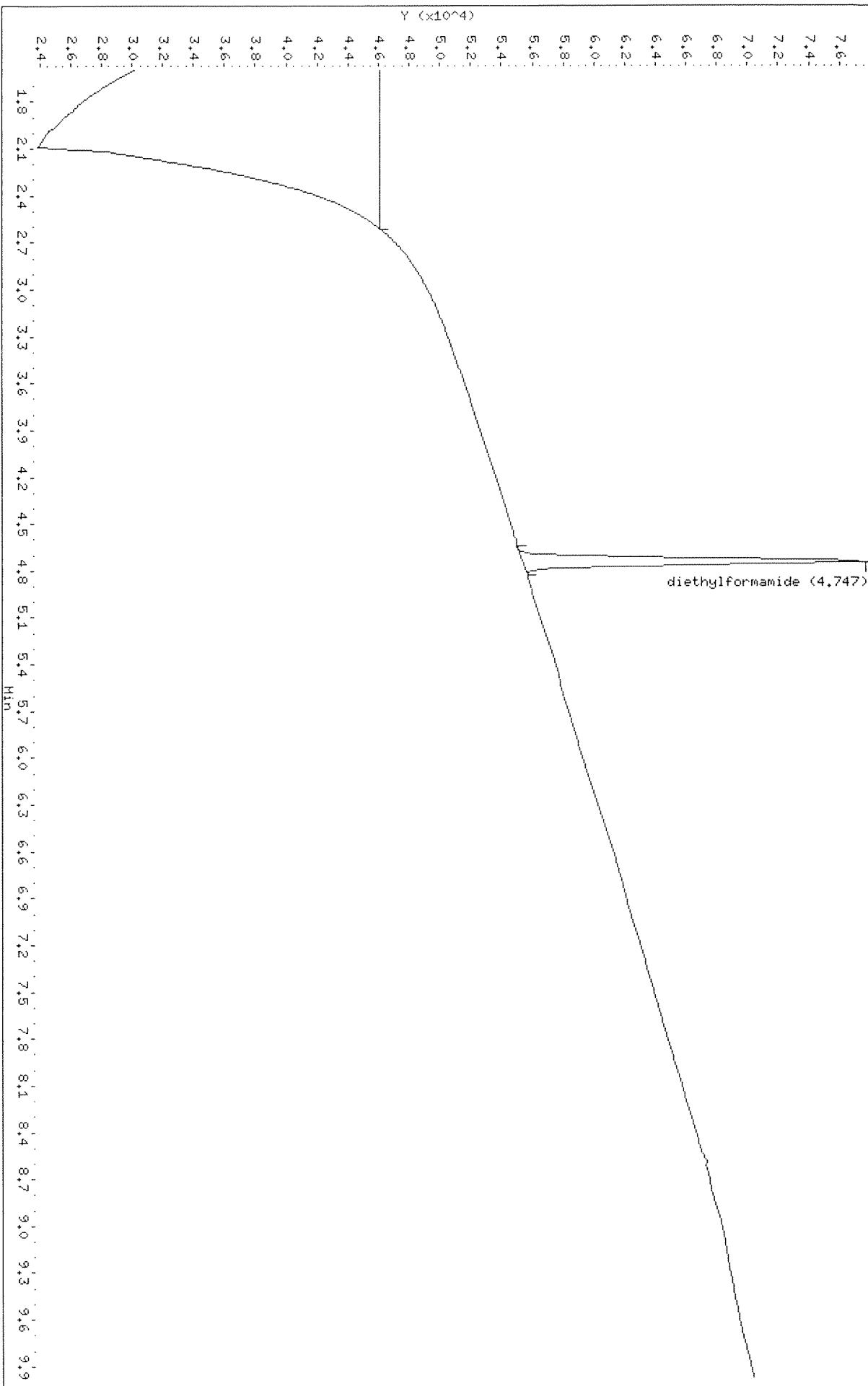
Data File: \\Target\_server\\GG\\chem\\gc11.i\\GC11CJ08B1.b\\BCJ2108.d  
Date : 08-OCT-2009 23:23

Client ID: OC-SB-41341.0\5.0-X  
Purge Volume: 0.0  
Column phase: ZB-WAX

Sample Info: DHFB040A.M,GC11CJ08B1.B,1,SC5605-2

Instrument: gc11.i  
Operator: KT  
Column diameter: 0.53

\\Target\_server\\GG\\chem\\gc11.i\\GC11CJ08B1.b\\BCJ2108.d\\BCJ2108.RAW



KATAHDIN ANALYTICAL SERVICES  
Report of Analytical Results

Client: Olin Corporation  
Project: Wilmington  
PO No:  
Sample Date: 09/17/09  
Received Date: 09/19/09  
Extraction Date: 09/23/09  
Analysis Date: 08-OCT-2009 23:37  
Report Date: 10/09/2009  
Matrix: SOIL  
% Solids: 19.3

Lab ID: SC5605-3  
Client ID: OC-SB-435-0.0/1.0-X  
SDG: WIL-7  
Extracted by: JLP  
Extraction Method: 8033M  
Analyst: KT  
Analysis Method: SW846 8033M  
Lab Prep Batch: WG68986  
Units: mg/Kgdrwt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	2.2	1.0	0.80	2.2	2.2
	diethylformamide		71%				

Page 01 of 01 BCJ2109.d

Data File: \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2109.d  
Report Date: 09-Oct-2009 10:23

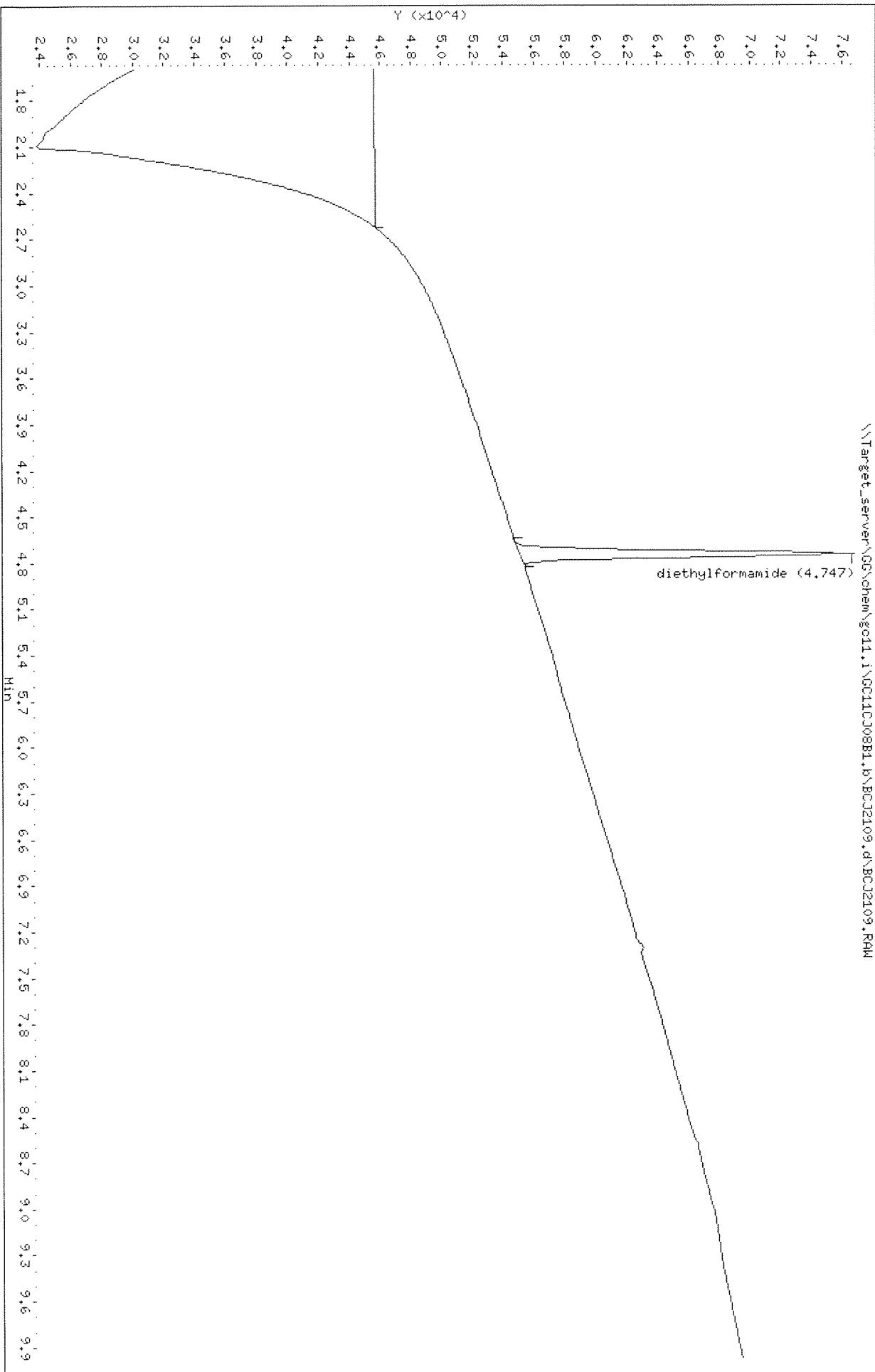
Katahdin Analytical Services

Data file : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2109.d  
Lab Smp Id: SC5605-3 Client Smp ID: OC-SB-435-0.0/1.0-X  
Inj Date : 08-OCT-2009 23:37  
Operator : KT Inst ID: gc11.i  
Smp Info : DMFB040A.M, GC11CJ08B1.B, 1, SC5605-3  
Misc Info : SW846 8033M  
Comment :  
Method : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\dmfb040A.m  
Meth Date : 09-Oct-2009 10:22 jprescott Quant Type: ESTD  
Cal Date : 08-OCT-2009 13:48 Cal File: BCJ2072.d  
Als bottle: 1  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12

Concentration Formula: Amt \* DF \* (Vt/Vo)\*(100/(100-M)) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.04000	Volume of final extract (L)
Vo	0.00191	Sample Weight
M	80.716	% Moisture
Cpnd Variable		Local Compound Variable

Compounds	CONCENTRATIONS						REVIEW CODE
	ON-COLUMN			FINAL			
	( mg/L)	(mg/Kgdrwt)					
\$ 2 diethylformamide	RT	EXP RT	DLT RT	RESPONSE	=====	=====	
	====	=====	=====	=====	=====	=====	
	4.746	4.760	-0.014	62807	0.35487	38.5	



KATAHDIN ANALYTICAL SERVICES  
Report of Analytical Results

Client: Olin Corporation Lab ID: SC5605-4  
Project: Wilmington Client ID: OC-SB-435-11/15-XXX  
PO No: SDG: WIL-7  
Sample Date: 09/17/09 Extracted by: JLP  
Received Date: 09/19/09 Extraction Method: 8033M  
Extraction Date: 09/23/09 Analyst: KT  
Analysis Date: 08-OCT-2009 23:52 Analysis Method: SW846 8033M  
Report Date: 10/09/2009 Lab Prep Batch: WG68986  
Matrix: SOIL Units: mg/Kgdrwt  
% Solids: 91.7

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.48	1.0	0.80	0.48	0.48
	diethylformamide		75%				

Page 01 of 01 BCJ2110.d

Data File: \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2110.d  
Report Date: 09-Oct-2009 10:23

Katahdin Analytical Services

Data file : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2110.d  
Lab Smp Id: SC5605-4 Client Smp ID: OC-SB-435-11/15-XXX  
Inj Date : 08-OCT-2009 23:52  
Operator : KT Inst ID: gc11.i  
Smp Info : DMFB040A.M,GC11CJ08B1.B,1,SC5605-4  
Misc Info : SW846 8033M  
Comment :  
Method : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\dmfB040A.m  
Meth Date : 09-Oct-2009 10:22 jprescott Quant Type: ESTD  
Cal Date : 08-OCT-2009 13:48 Cal File: BCJ2072.d  
Als bottle: 1  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12

Concentration Formula: Amt \* DF \* (Vt/Vo)\*(100/(100-M)) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.04000	Volume of final extract (L)
Vo	0.00183	Sample Weight
M	8.315	% Moisture
Cpnd Variable		Local Compound Variable

Compounds	CONCENTRATIONS						REVIEW CODE
	ON-COLUMN			FINAL			
	(mg/L)	(mg/Kgdrwt)					
\$ 2 diethylformamide	4.746	4.760	-0.014	67075	0.37742	9.00 (M)	MS

*JVP  
10/9/09*

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Target\_server\GC\chem\gc11.i\GC11CJ08B1.b\BCJ2110.d  
Date : 08-OCT-2009 23:52

Client ID: GC-SB-435-11-15-XXX

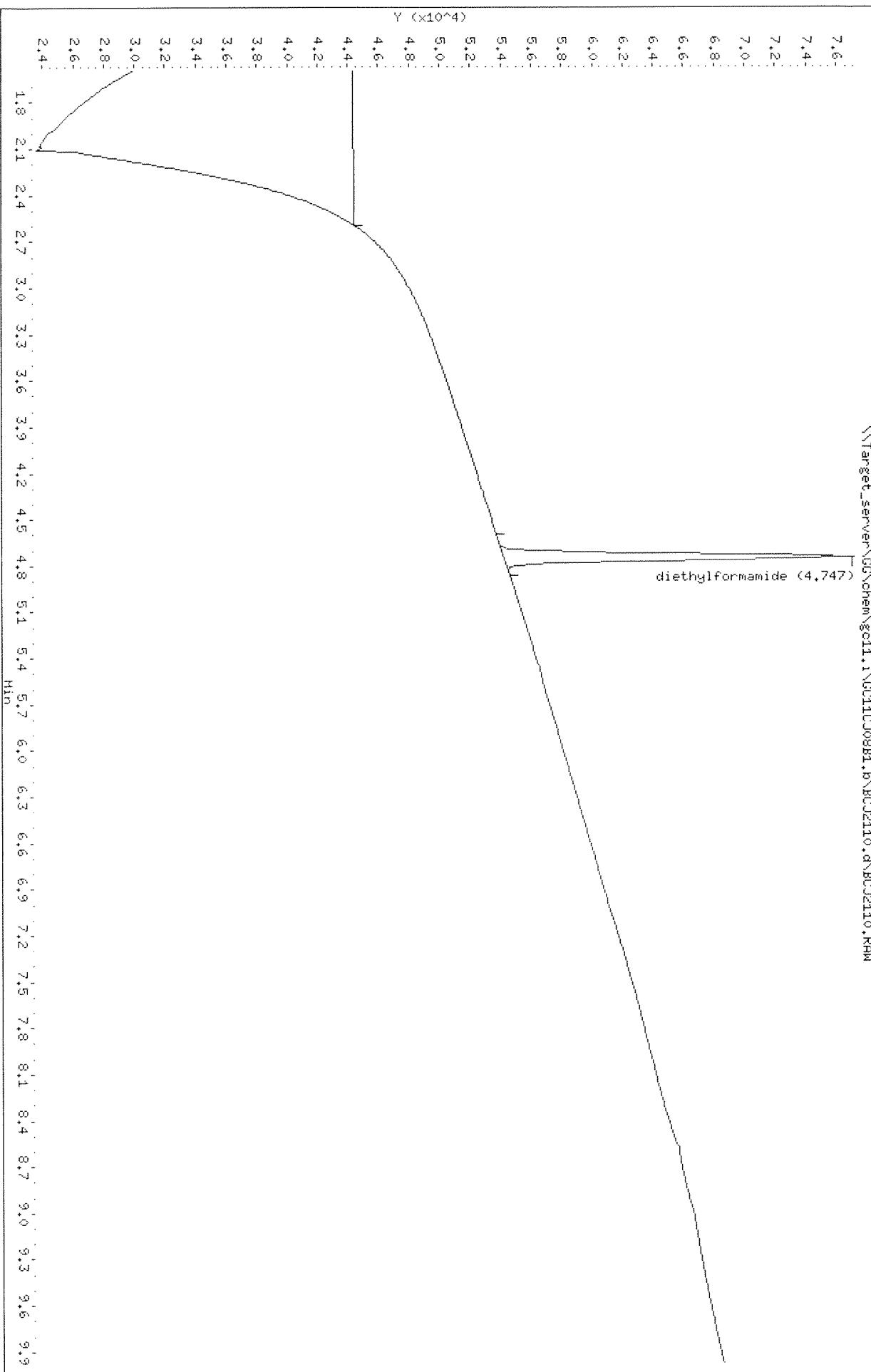
Sample Info: DMFB040A.M,GC11CJ08B1.B,1,SC5605-4

Purge Volume: 0.0

Column phase: ZB-WAX

\\Target\_server\GC\chem\gc11.i\GC11CJ08B1.b\BCJ2110.d\BCJ2110.RAW

Instrument: gc11.i  
Operator: KT  
Column diameter: 0.53



KATAHDIN ANALYTICAL SERVICES  
Report of Analytical Results

Client: Olin Corporation  
Project: Wilmington  
PO No:  
Sample Date: 09/17/09  
Received Date: 09/19/09  
Extraction Date: 09/23/09  
Analysis Date: 09-OCT-2009 00:06  
Report Date: 10/09/2009  
Matrix: SOIL  
% Solids: 91.5

Lab ID: SC5605-5  
Client ID: OC-SB-435-6.0/10-XX  
SDG: WIL-7  
Extracted by: JLP  
Extraction Method: 8033M  
Analyst: KT  
Analysis Method: SW846 8033M  
Lab Prep Batch: WG68986  
Units: mg/Kgdrwt

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.45	1.0	0.80	0.45	0.45
	diethylformamide		76%				

Page 01 of 01 BCJ2111.d

Data File: \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2111.d  
Report Date: 09-Oct-2009 10:23

Katahdin Analytical Services

Data file : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2111.d  
Lab Smp Id: SC5605-5 Client Smp ID: OC-SB-435-6.0/10-XX  
Inj Date : 09-OCT-2009 00:06  
Operator : KT Inst ID: gc11.i  
Smp Info : DMFB040A.M, GC11CJ08B1.B, 1, SC5605-5  
Misc Info : SW846 8033M  
Comment :  
Method : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\dmfB040A.m  
Meth Date : 09-Oct-2009 10:22 jprescott Quant Type: ESTD  
Cal Date : 08-OCT-2009 13:48 Cal File: BCJ2072.d  
Als bottle: 1  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12

Concentration Formula: Amt \* DF \* (Vt/Vo)\*(100/(100-M)) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.04000	Volume of final extract (L)
Vo	0.00196	Sample Weight
M	8.499	% Moisture
Cpnd Variable		Local Compound Variable

Compounds	CONCENTRATIONS							REVIEW CODE	
	ON-COLUMN			FINAL					
	( mg/L )	(mg/Kgdrwt)	=====	=====	=====	=====	=====		
\$ 2 diethylformamide	4.746	4.760	-0.014	67202	0.37809	8.43 (M)		M5	

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Target\_server\\GC\\chem\\gc11.i\\GC1CJ08B1.b\\BCJ2111.d  
Date : 08-OCT-2009 00:06

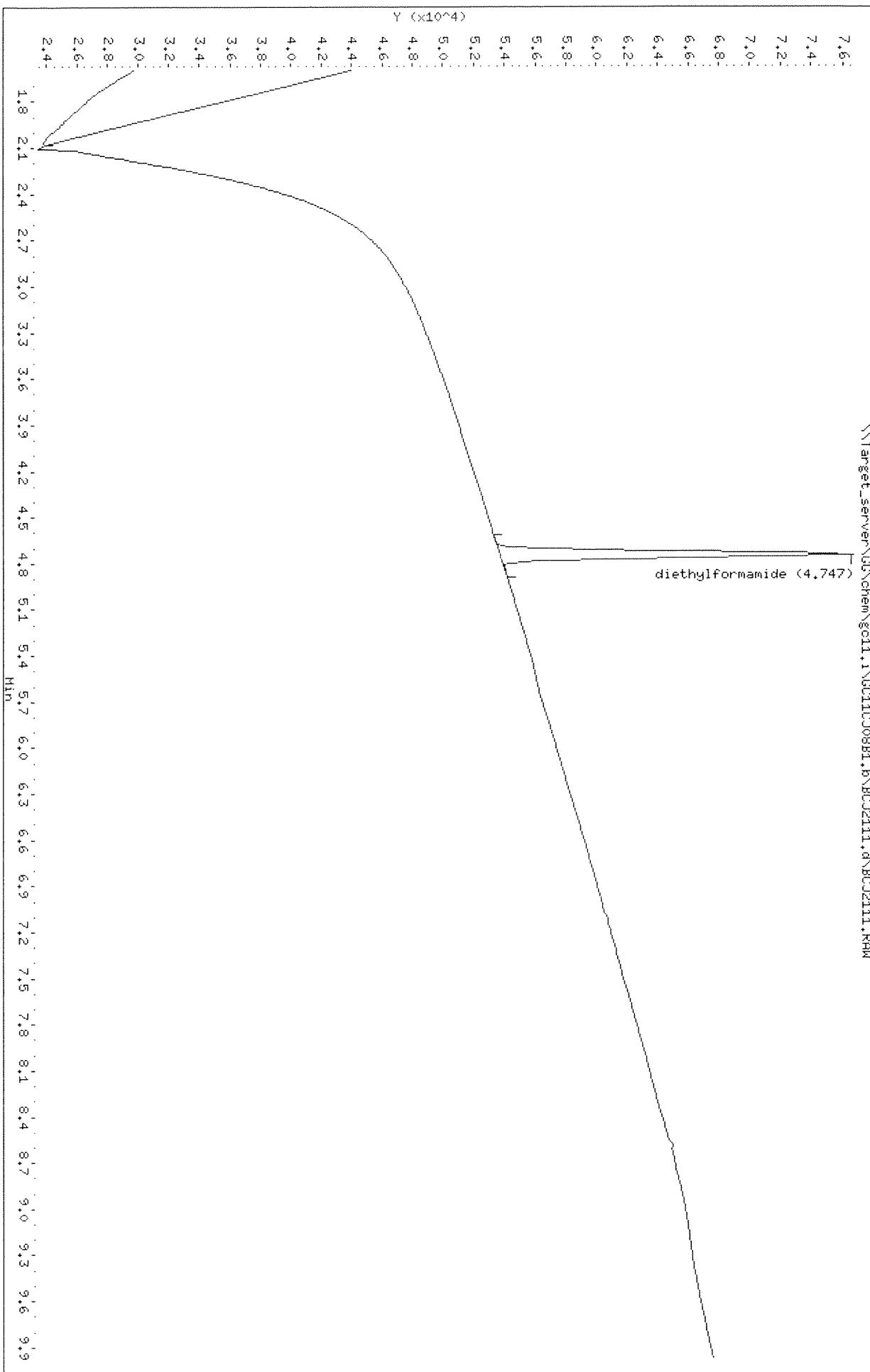
Client ID: 0C-SB-435-6.0/10-XX  
Sample Info: DMFB040A.H,GC11CJ08B1.B,4,SC5605-5

Purge Volume: 0.0

Column Phase: ZB-WAX

\\Target\_server\\GC\\chem\\gc11.i\\GC1CJ08B1.b\\BCJ2111.d\\BCJ2111.RAW

Instrument: gc11.i  
Operator: KT  
Column diameter: 0.53



KATAHDIN ANALYTICAL SERVICES  
Report of Analytical Results

Client: Olin Corporation  
Project: Wilmington  
PO No:  
Sample Date: 09/17/09  
Received Date: 09/19/09  
Extraction Date:  
Analysis Date: 23-SEP-2009 10:32  
Report Date: 10/09/2009  
Matrix: WATER  
% Solids: NA

Lab ID: SC5605-6  
Client ID: OC-EBK-012  
SDG: WIL-7  
Extracted by:  
Extraction Method: 8033M  
Analyst: JLP  
Analysis Method: SW846 M8033  
Lab Prep Batch: WG68988  
Units: mg/L

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.020	1.0	0.020	0.020	0.0048
	diethylformamide		79%				

Page 01 of 01 BCI6069.d

Data File: \\Target\_server\GG\chem\gc11.i\GC11CI23A1.b\BCI6069.d  
Report Date: 09-Oct-2009 10:23

Katahdin Analytical Services

Data file : \\Target\_server\GG\chem\gc11.i\GC11CI23A1.b\BCI6069.d  
Lab Smp Id: SC5605-6 Client Smp ID: OC-EBK-012  
Inj Date : 23-SEP-2009 10:32  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB038A.M, GC11CI23A1.B, 1, SC5605-6  
Misc Info : SW846 M8033  
Comment :  
Method : \\\TARGET\_SERVER\GG\chem\gc11.i\GC11CI23A1.B\DMFB038A.m  
Meth Date : 09-Oct-2009 10:22 jprescott Quant Type: ESTD  
Cal Date : 15-SEP-2009 11:43 Cal File: BCI4082.d  
Als bottle: 1  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12  
Processing Host: V200T2

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	FinalVolume (L)
Vo	0.00100	SampleVolume (L)
Cpnd Variable		Local Compound Variable

Compounds	CONCENTRATIONS						REVIEW CODE
	RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN	FINAL	
					( mg/L)	( mg/L)	
\$ 2 diethylformamide	2.680	2.680	0.000	20388	0.39515	0.395	

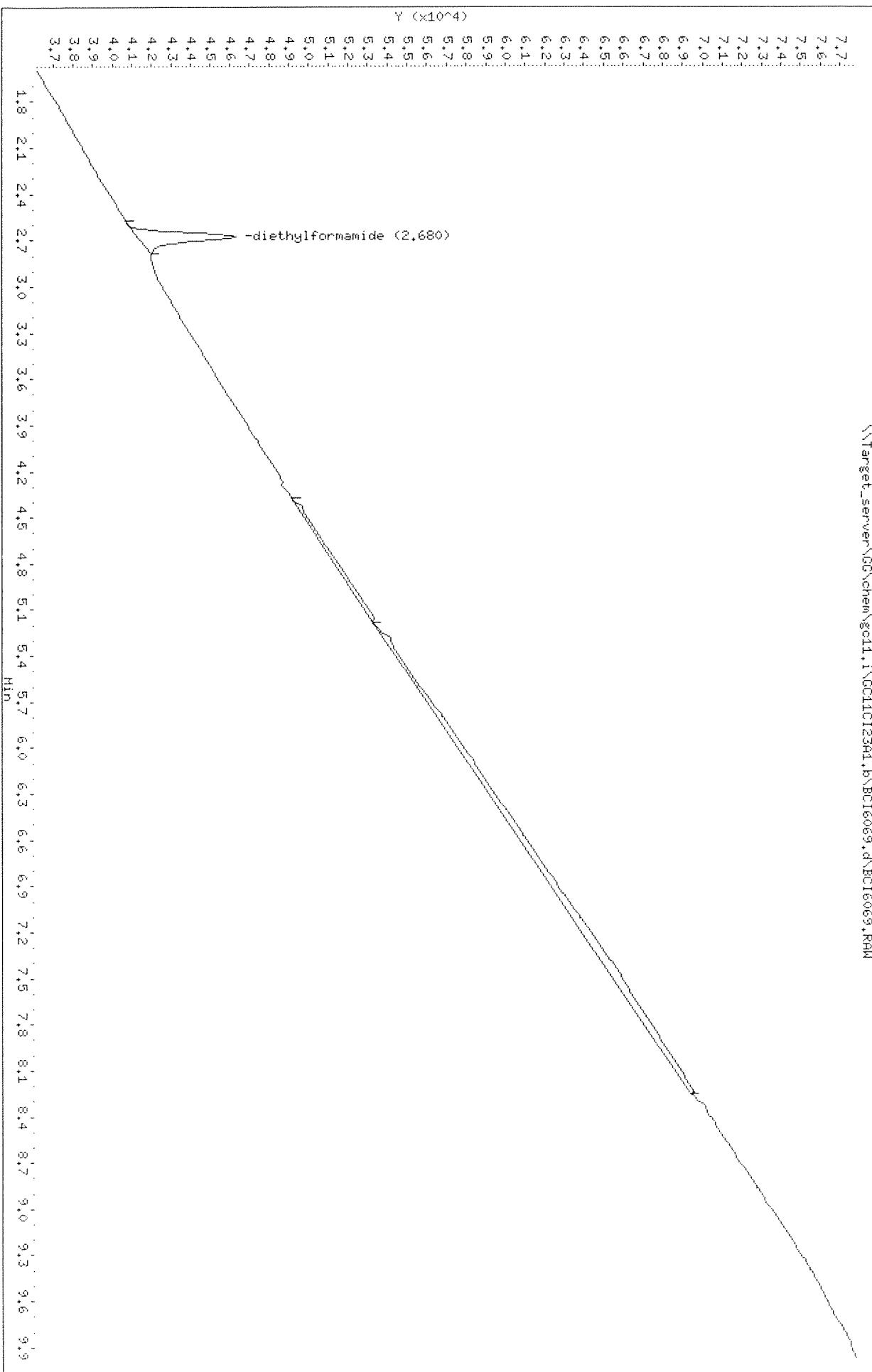
Data File: \\Target\_server\\GC\\chem\\gc11.i\\GC11C123A1.b\\BC16069.d  
Date : 23-SEP-2009 10:32  
Client ID: OC-FBK-012

Sample Info: DMFB038a.M,GC11C123A1.B,1,SC5605-6  
Purge Volume: 0.0

Column Phase: ZB-WAX

\\Target\_server\\GC\\chem\\gc11.i\\GC11C123A1.b\\BC16069.d\\BC16069.RAW

Instrument: gc11.i  
Operator: JLP  
Column diameter: 0.53



## **Standards Data Section**

FORM 6  
DMF INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project WILMINGTON SDG No.: WIL-7

Instrument ID: GC11 Calibration Date(s): 09/15/09 09/15/09

Column: ZB-WAX ID: 0.53 (mm) Calibration Time(s): 0936 1143

LAB FILE ID: RF0.02: BCI4073 RF0.05: BCI4074 RF0.1: BCI4075  
RF0.25: BCI4077 RF0.5: BCI4079 RF1: BCI4082

COMPOUND	RF0.02	RF0.05	RF0.1	RF0.25	RF0.5	RF1	CURVE	COEFFICIENTS		%RSD	MAX %RSD
								A0	A1		
dimethylformamide	921	1500	3764	12201	24415	55088	LINR	2.106e-002	1.811e-005	0.99669	0.99000
diethylformamide	13241	25644	58420	154630	276360		LINR	9.989e-002	1.448e-005	0.99576	0.99000

FORM VI DMF

Data File: \\Target\_server\GG\chem\gc11.i\GC11CI15A1.b\BCI4073.d  
Report Date: 09-Oct-2009 10:23

Katahdin Analytical Services

Data file : \\Target\_server\GG\chem\gc11.i\GC11CI15A1.b\BCI4073.d  
Lab Smp Id: ICAL 0.02  
Inj Date : 15-SEP-2009 09:36  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB038A.M, GC11CI15A1.B, 1, ICAL 0.02  
Misc Info :  
Comment :  
Method : \\Target\_server\GG\chem\gc11.i\GC11CI15A1.b\dmfB038A.m  
Meth Date : 09-Oct-2009 10:22 jprescott Quant Type: ESTD  
Cal Date : 15-SEP-2009 09:36 Cal File: BCI4073.RAW  
Als bottle: 1 Calibration Sample, Level: 1  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	FinalVolume (L)
Vo	0.00100	SampleVolume (L)
Cpnd Variable		Local Compound Variable

Compounds	AMOUNTS						REVIEW CODE
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (mg/L)	ON-COL (mg/L)	
1 dimethylformamide	1.973	1.960	0.013	921	0.02000	0.0377 (M)	M5
\$ 2 diethylformamide	2.693	2.680	0.013	13241	0.25000	0.292 (M)	JLP 100909

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Target\_server\GC\chem\gc11.i\GC1C15A1.b\BC14073.d  
Date : 15-SEP-2009 09:36

Client ID:

Sample Info: D:\FBe38A.M,GC1C15A1.B,1,ICAL 0.02  
Purge Volume: 0.0

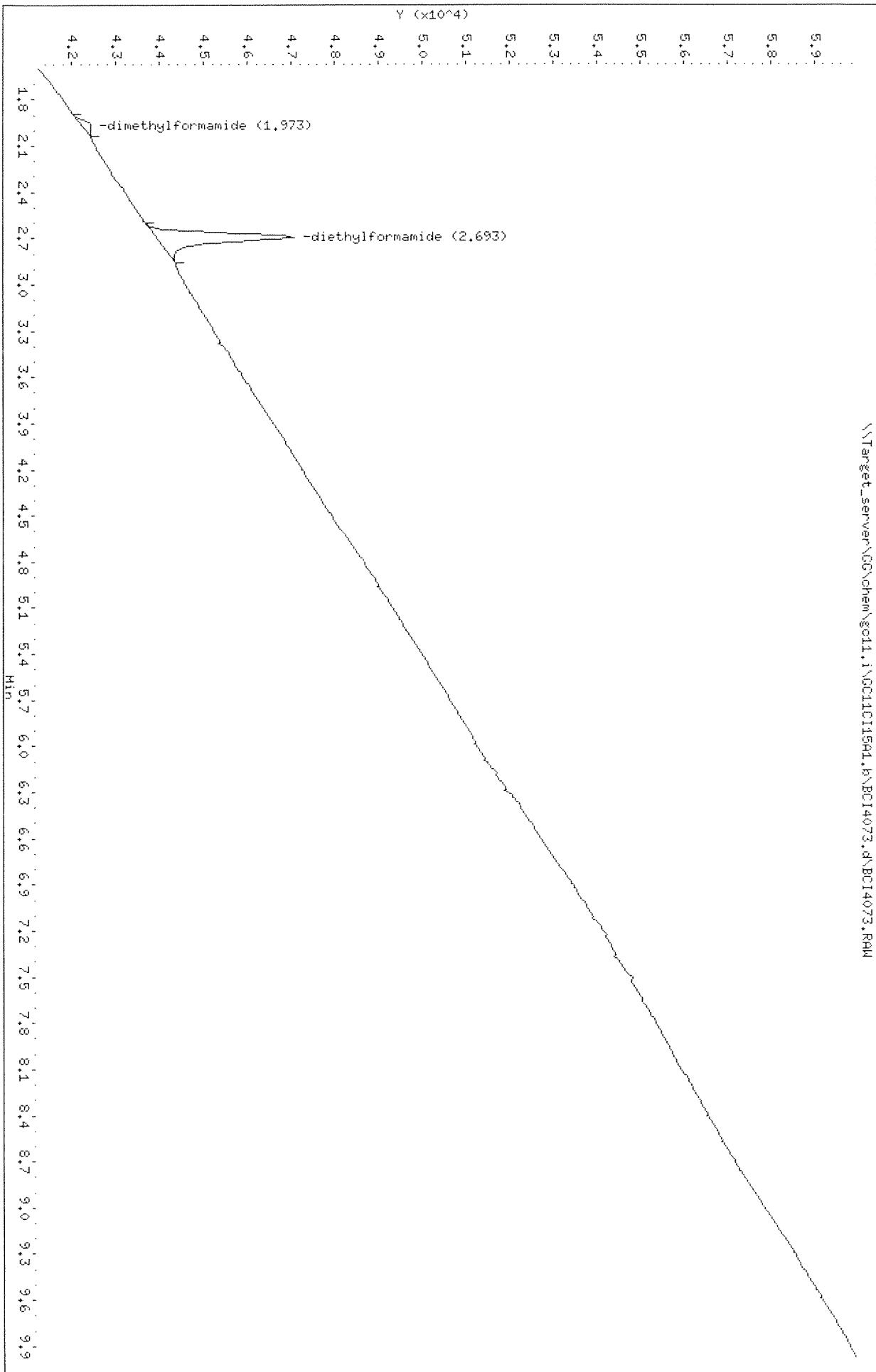
Column Phase: ZB-MAX

\\Target\_server\GC\chem\gc11.i\GC1C15A1.b\BC14073.d\BC14073.RAW

Instrument: gc11.i

Operator: JLP

Column diameter: 0.53



Data File: \\Target\_server\GG\chem\gc11.i\GC11CI15A1.b\BCI4074.d  
Report Date: 09-Oct-2009 10:23

Katahdin Analytical Services

Data file : \\Target\_server\GG\chem\gc11.i\GC11CI15A1.b\BCI4074.d  
Lab Smp Id: ICAL 0.05  
Inj Date : 15-SEP-2009 09:50  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB038A.M,GC11CI15A1.B,1,ICAL 0.05  
Misc Info :  
Comment :  
Method : \\Target\_server\GG\chem\gc11.i\GC11CI15A1.b\dmfB038A.m  
Meth Date : 09-Oct-2009 10:22 jprescott Quant Type: ESTD  
Cal Date : 15-SEP-2009 09:50 Cal File: BCI4074.d  
Als bottle: 1 Calibration Sample, Level: 2  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	FinalVolume (L)
Vo	0.00100	SampleVolume (L)
Cpnd Variable		Local Compound Variable

Compounds	AMOUNTS						REVIEW	CODE
	RT	EXP RT	DLT RT	RESPONSE	( mg/L)	ON-COL ( mg/L)		
1 dimethylformamide	1.973	1.960	0.013	1500	0.05000	0.0482 (M)	MS	JP 100907
\$ 2 diethylformamide	2.693	2.680	0.013	25644	0.50000	0.471 (M)		

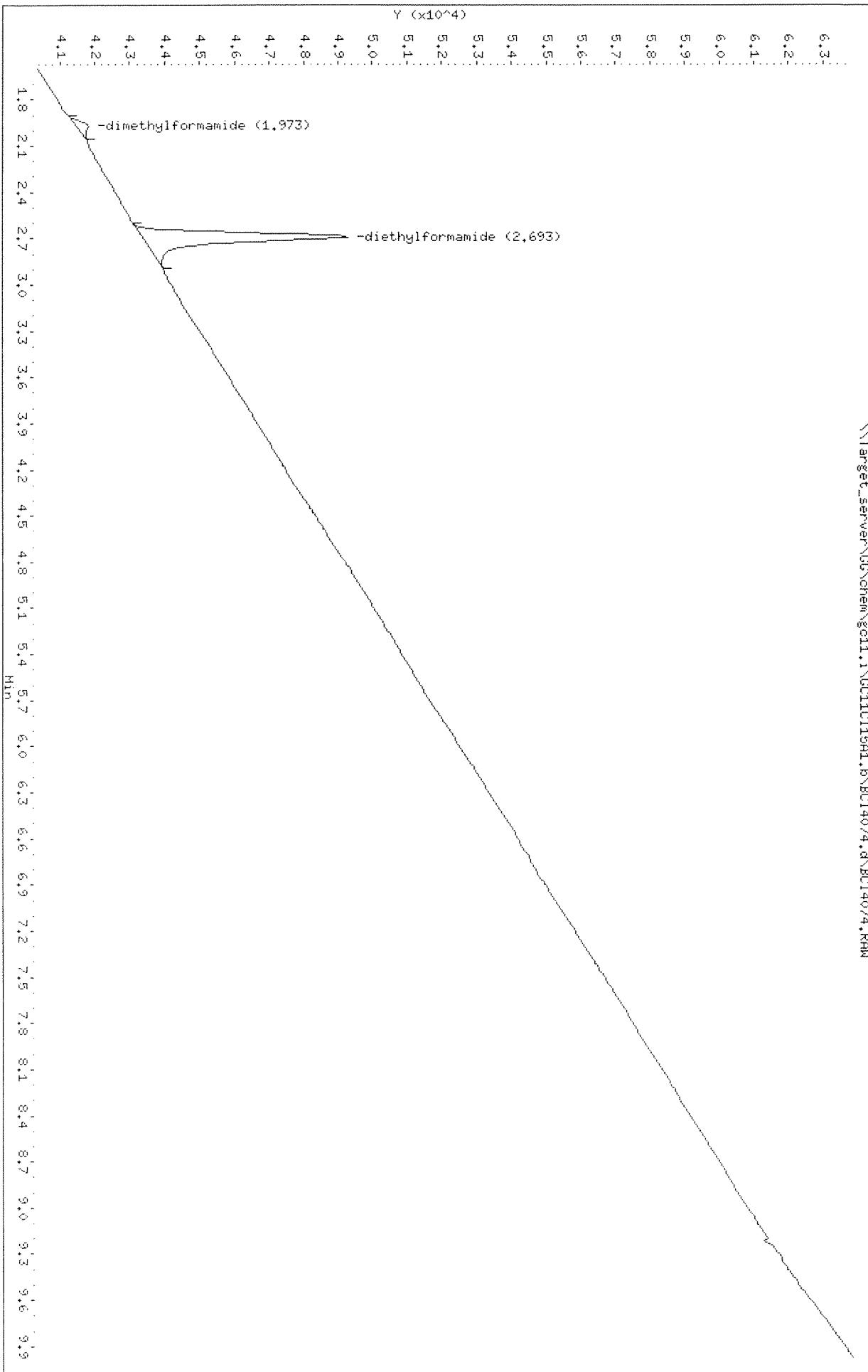
QC Flag Legend

M - Compound response manually integrated.

Data File: \\Target\_server\GC\chem\gc11.i\GC11C115A1.b\BC14074.d  
Date : 15-SEP-2009 09:50  
Client ID:  
Sample Info: DFB038A.M,GC11C115A1.B,1,ICAL 0.05  
Purge Volume: 0.0  
Column Phase: ZB-WAX

\\Target\_server\GC\chem\gc11.i\GC11C115A1.b\BC14074.d,BC14074.d  
Instrument: sc11.i  
Operator: JLP  
Column diameter: 0.53

\\Target\_server\GC\chem\gc11.i\GC11C115A1.b\BC14074.d,BC14074.RAW



Data File: \\Target\_server\GG\chem\gc11.i\GC11CI15A1.b\BCI4075.d  
Report Date: 09-Oct-2009 10:23

Katahdin Analytical Services

Data file : \\Target\_server\GG\chem\gc11.i\GC11CI15A1.b\BCI4075.d  
Lab Smp Id: ICAL 0.1  
Inj Date : 15-SEP-2009 10:04  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB038A.M, GC11CI15A1.B, 1, ICAL 0.1  
Misc Info :  
Comment :  
Method : \\\TARGET SERVER\GG\chem\gc11.i\GC11CI15A1.B\DMFB038A.m  
Meth Date : 09-Oct-2009 10:22 jprescott Quant Type: ESTD  
Cal Date : 15-SEP-2009 10:04 Cal File: BCI4075.d  
Als bottle: 1 Calibration Sample, Level: 3  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12  
Processing Host: V200T2

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	FinalVolume (L)
Vo	0.00100	SampleVolume (L)
Cpnd Variable		Local Compound Variable

Compounds	AMOUNTS						REVIEW CODE
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT	ON-COL	
					( mg/L)	( mg/L)	
1 dimethylformamide	1.973	1.960	0.013	3764	0.10000	0.102(M)	M5
\$ 2 diethylformamide	2.693	2.680	0.013	58420	1.00000	1.02(M)	JLP 100909

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Target\_server\GC\chem\gc11.i\GC11C115A1.b\BC14075.d  
Date : 15-SEP-2009 10:04

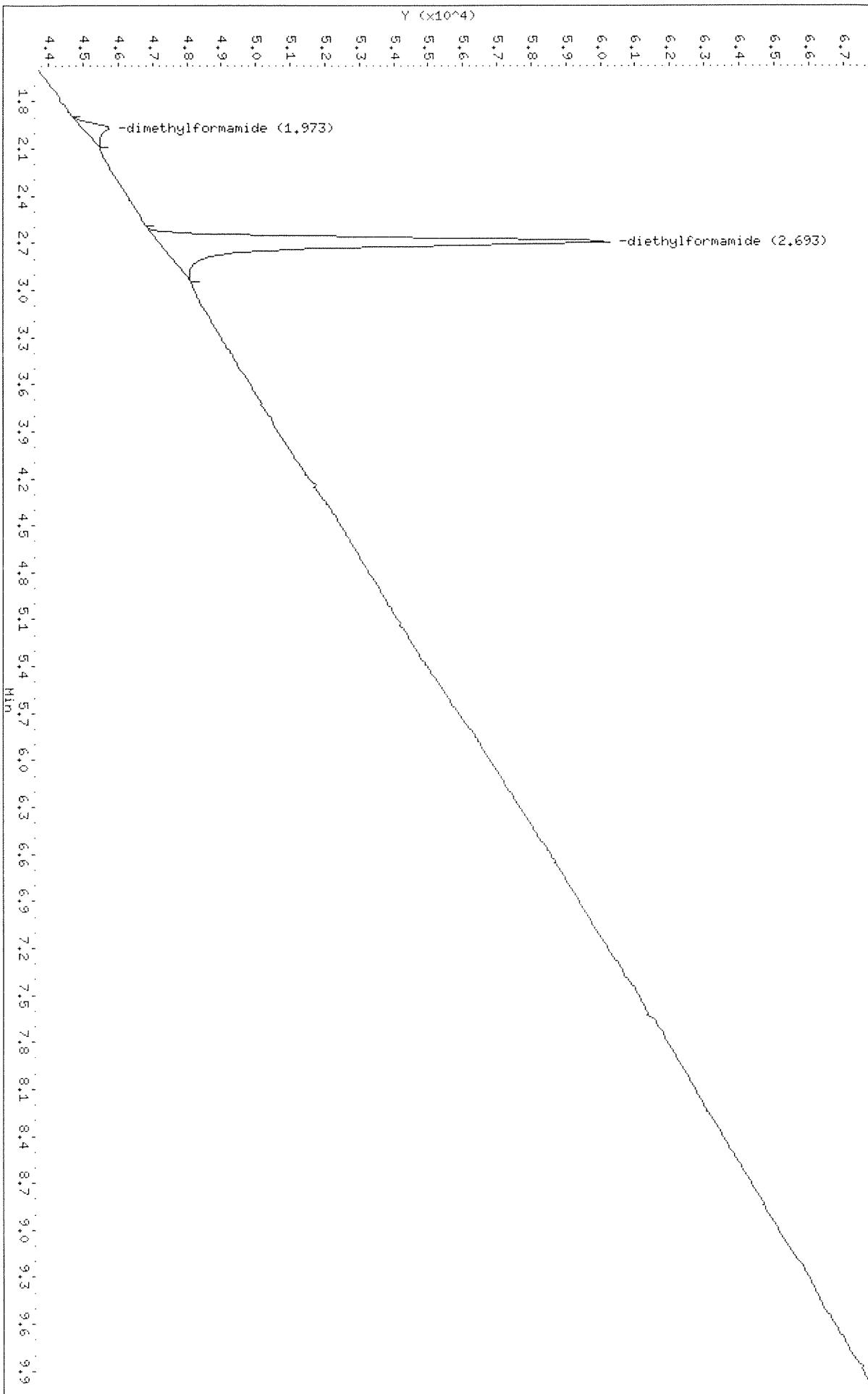
Client ID:

Sample Info: DMFB0389.M,GC11C115A1.B,1,ICAL 0.1

Purge Volume: 0.0

Column Phase: ZB-WAX

\\Target\_server\GC\chem\gc11.i\GC11C115A1.b\BC14075.d\BC14075.RAW



Data File: \\Target\_server\GG\chem\gc11.i\GC11CI15A1.b\BCI4077.d  
Report Date: 09-Oct-2009 10:23

Katahdin Analytical Services

Data file : \\Target\_server\GG\chem\gc11.i\GC11CI15A1.b\BCI4077.d  
Lab Smp Id: ICAL 0.25  
Inj Date : 15-SEP-2009 10:32  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB038A.M,GC11CI15A1.B,1,ICAL 0.25  
Misc Info :  
Comment :  
Method : \\Target\_server\GG\chem\gc11.i\GC11CI15A1.b\dmfb038A.m  
Meth Date : 09-Oct-2009 10:22 jprescott Quant Type: ESTD  
Cal Date : 15-SEP-2009 10:32 Cal File: BCI4077.d  
Als bottle: 1 Calibration Sample, Level: 4  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	FinalVolume (L)
Vo	0.00100	SampleVolume (L)
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS		REVIEW	CODE
					CAL-AMT ( mg/L)	ON-COL ( mg/L)		
1 dimethylformamide	1.960	1.960	0.000	12201	0.25000	0.255 (M)		M5
\$ 2 diethylformamide	2.680	2.680	0.000	154631	2.50000	2.34 (M)	JLP 100909	

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Target\_server\GC\chem\gc11.i\GC11C15A1.b\BC14077.d  
Date : 15-SEP-2009 10:32

Client ID:

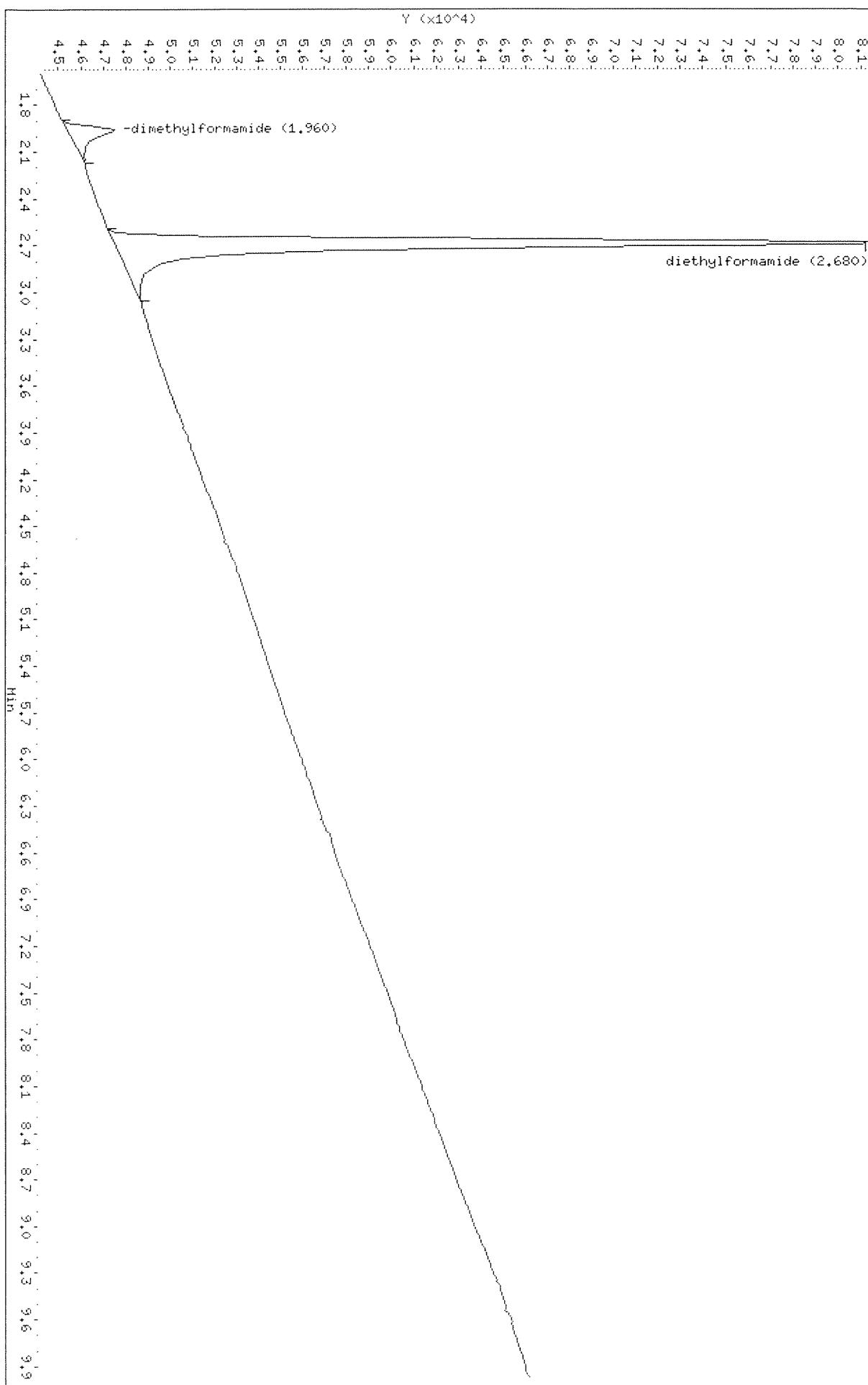
Sample Info: DMF038A.M,GC11C15A1.B,1,ICAL 0.25

Purge Volume: 0.0

Column Phase: ZB-WAX

Instrument: gc11.i  
Operator: JLP  
Column diameter: 0.53

\\Target\_server\GC\chem\gc11.i\GC11C15A1.b\BC14077.d\BC14077.RAW



Data File: \\Target\_server\GG\chem\gc11.i\GC11CI15A1.b\BCI4079.d  
Report Date: 09-Oct-2009 10:23

Katahdin Analytical Services

Data file : \\Target\_server\GG\chem\gc11.i\GC11CI15A1.b\BCI4079.d  
Lab Smp Id: ICAL 0.5  
Inj Date : 15-SEP-2009 11:01  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB038A.M, GC11CI15A1.B, 1, ICAL 0.5  
Misc Info :  
Comment :  
Method : \\\TARGET\_SERVER\GG\chem\gc11.i\GC11CI15A1.B\DMFB038A.m  
Meth Date : 09-Oct-2009 10:22 jprescott Quant Type: ESTD  
Cal Date : 15-SEP-2009 11:01 Cal File: BCI4079.d  
Als bottle: 1 Calibration Sample, Level: 5  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12  
Processing Host: V200T2

Concentration Formula: Amt \* DF \* (Vt/Vo)\*1000 \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	Final Volume (L)
Vo	0.00100	Sample Volume (L)
Cpnd Variable		Local Compound Variable

Compounds	AMOUNTS						REVIEW CODE
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT	ON-COL	
	( mg/L)	( mg/L)					
1 dimethylformamide	1.960	1.960	0.000	24415	0.50000	0.500 (M)	M5
S 2 diethylformamide	2.693	2.680	0.013	276361	4.00000	4.10 (AM)	

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.  
M - Compound response manually integrated.

JLP  
1009109

Data File: \\Target\_server\\GC\\chem\\gc11.i\\GC11C115A1.b\\BC14079.d  
Date : 15-SEP-2009 11:01

Client ID:

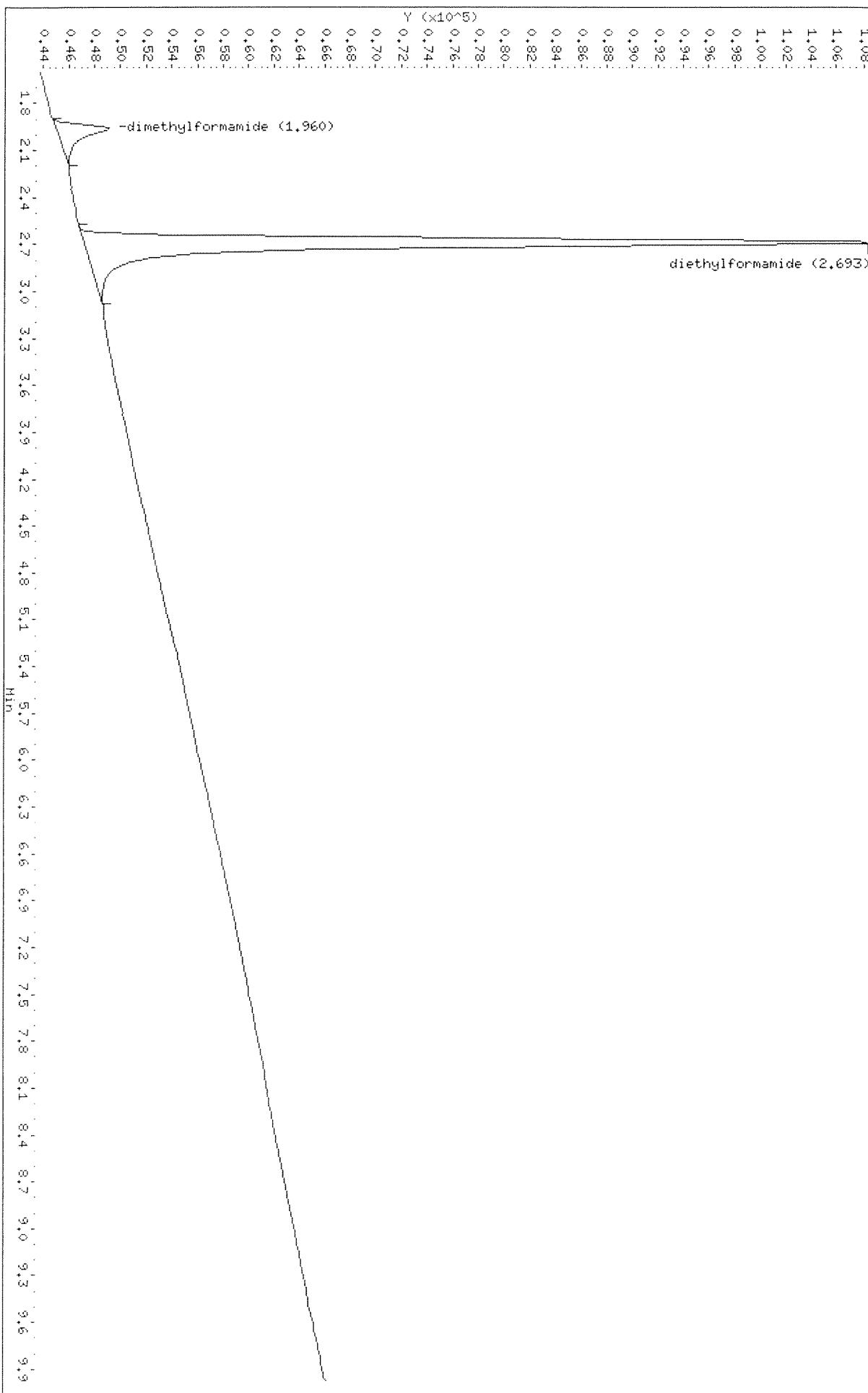
Sample Info: DMFB038A.M,GC11C115A1.B,1,ICAL 0.5

Purge Volume: 0.0

Column Phase: ZB-1

\\Target\_server\\GC\\chem\\gc11.i\\GC11C115A1.b\\BC14079.RAW

Instrument: gc11.i  
Operator: JLP  
Column diameter: 0.25



Data File: \\Target\_server\GG\chem\gc11.i\GC11CI15A1.b\BCI4082.d  
Report Date: 09-Oct-2009 10:23

Katahdin Analytical Services

Data file : \\Target\_server\GG\chem\gc11.i\GC11CI15A1.b\BCI4082.d  
Lab Smp Id: ICAL 1.0  
Inj Date : 15-SEP-2009 11:43  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB038A.M, GC11CI15A1.B, 1, ICAL 1.0  
Misc Info :  
Comment :  
Method : \\\TARGET\_SERVER\GG\chem\gc11.i\GC11CI15A1.B\DMFB038A.m  
Meth Date : 09-Oct-2009 10:22 jprescott Quant Type: ESTD  
Cal Date : 15-SEP-2009 11:43 Cal File: BCI4082.d  
Als bottle: 1 Calibration Sample, Level: 6  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12  
Processing Host: V200T2

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	FinalVolume (L)
Vo	0.00100	SampleVolume (L)
Cpnd Variable		Local Compound Variable

Compounds	AMOUNTS						REVIEW CODE
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT	ON-COL	
					( mg/L)	( mg/L)	
1 dimethylformamide	1.960	1.960	0.000	55088	1.00000	1.02 (AM)	M5

QC Flag Legend

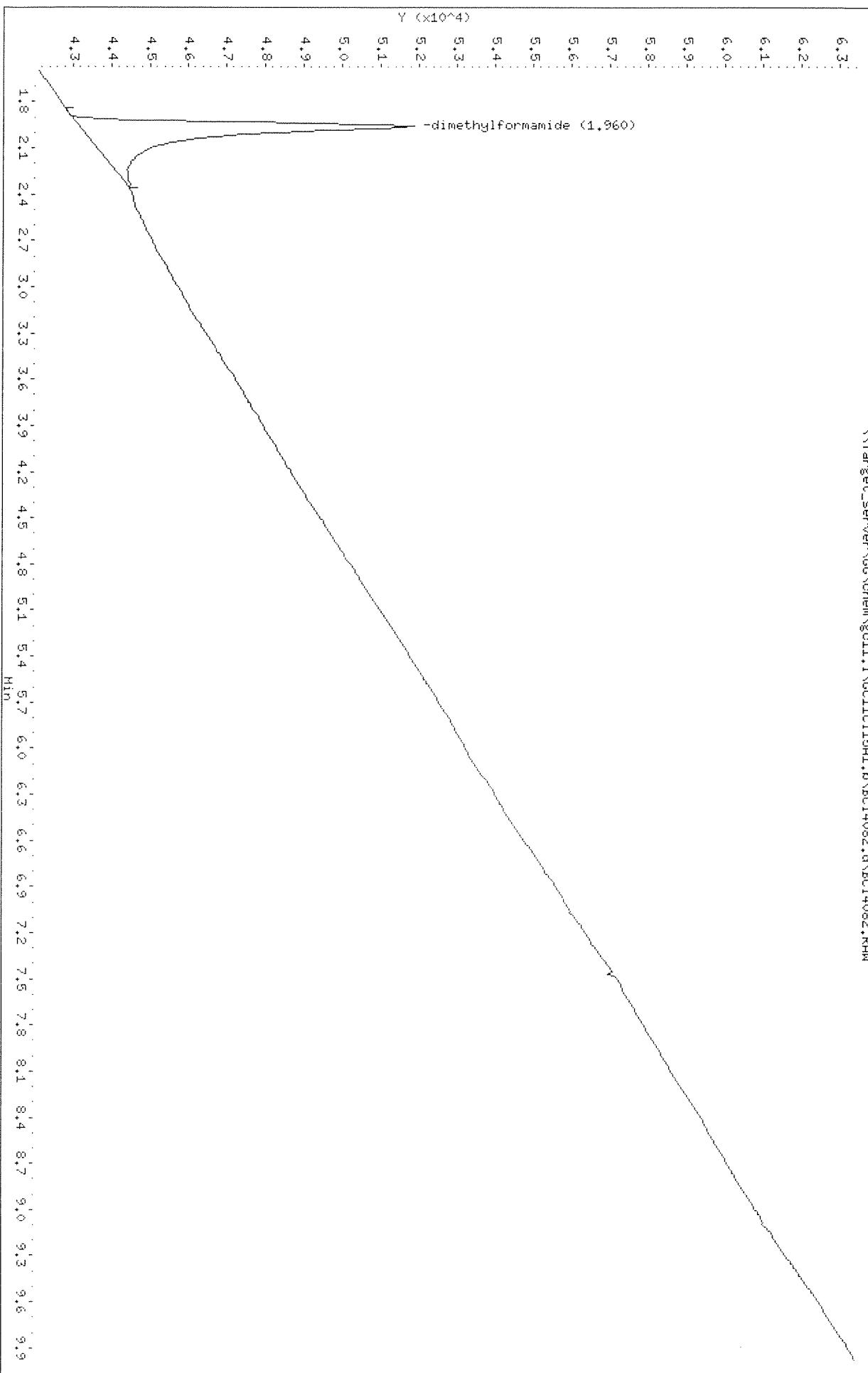
- A - Target compound detected but, quantitated amount exceeded maximum amount.  
M - Compound response manually integrated.

JP  
100909

Data File: \Target\_server\GC\chem\gc11.i\GC11C115A1.b\BC14082.d  
Date : 15-SEP-2009 11:43  
Client ID:  
Sample Info: DMFB038A.H,GC11C115A1.B,1,ICAL 1.0  
Purge Volume: 0.0  
Column Phase: ZB-WAX

Instrument: gc11.i  
Operator: JLP  
Column diameter: 0.53

\Target\_server\GC\chem\gc11.i\GC11C115A1.b\BC14082.d\BC14082.RAW



FORM 6  
DMF INITIAL CALIBRATION DATA

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project WILMINGTON

SDG No.: WIL-7

Instrument ID: GC11 Calibration Date(s): 10/08/09 10/08/09

Column: ZB-WAX ID: 0.53 (mm) Calibration Time(s): 1042 1348

LAB FILE ID: RF0.02: BCJ2059 RF0.05: BCJ2060 RF0.1: BCJ2061  
RF0.25: BCJ2063 RF0.5: BCJ2072 RF1: BCJ2068

COMPOUND	RF0.02	RF0.05	RF0.1	RF0.25	RF0.5	RF1	CURVE	COEFFICIENTS		%RSD	MAX %RSD
								A0	A1		
dimethylformamide	5578	11606	26284	60752	108470	218910	LINR	-9.67e-003	4.605e-006	0.99901	0.99000
diethylformamide	40915	91554	186960	455970	759670		LINR	2.296e-002	5.285e-006	0.99945	0.99000

FORM VI DMF

Data File: \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2059.d  
Report Date: 12-Oct-2009 11:51

Katahdin Analytical Services

Data file : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2059.d  
Lab Smp Id: ICAL 0.02  
Inj Date : 08-OCT-2009 10:42  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB040A.M,GC11CJ08B1.B,1,ICAL 0.02  
Misc Info :  
Comment :  
Method : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\dmfB040A.m  
Meth Date : 12-Oct-2009 11:51 gc11.i Quant Type: ESTD  
Cal Date : 08-OCT-2009 13:48 Cal File: BCJ2072.d  
Als bottle: 1 Calibration Sample, Level: 1  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12  
Processing Host: V200T2

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	FinalVolume (L)
Vo	0.00100	SampleVolume (L)
Cpnd Variable		Local Compound Variable

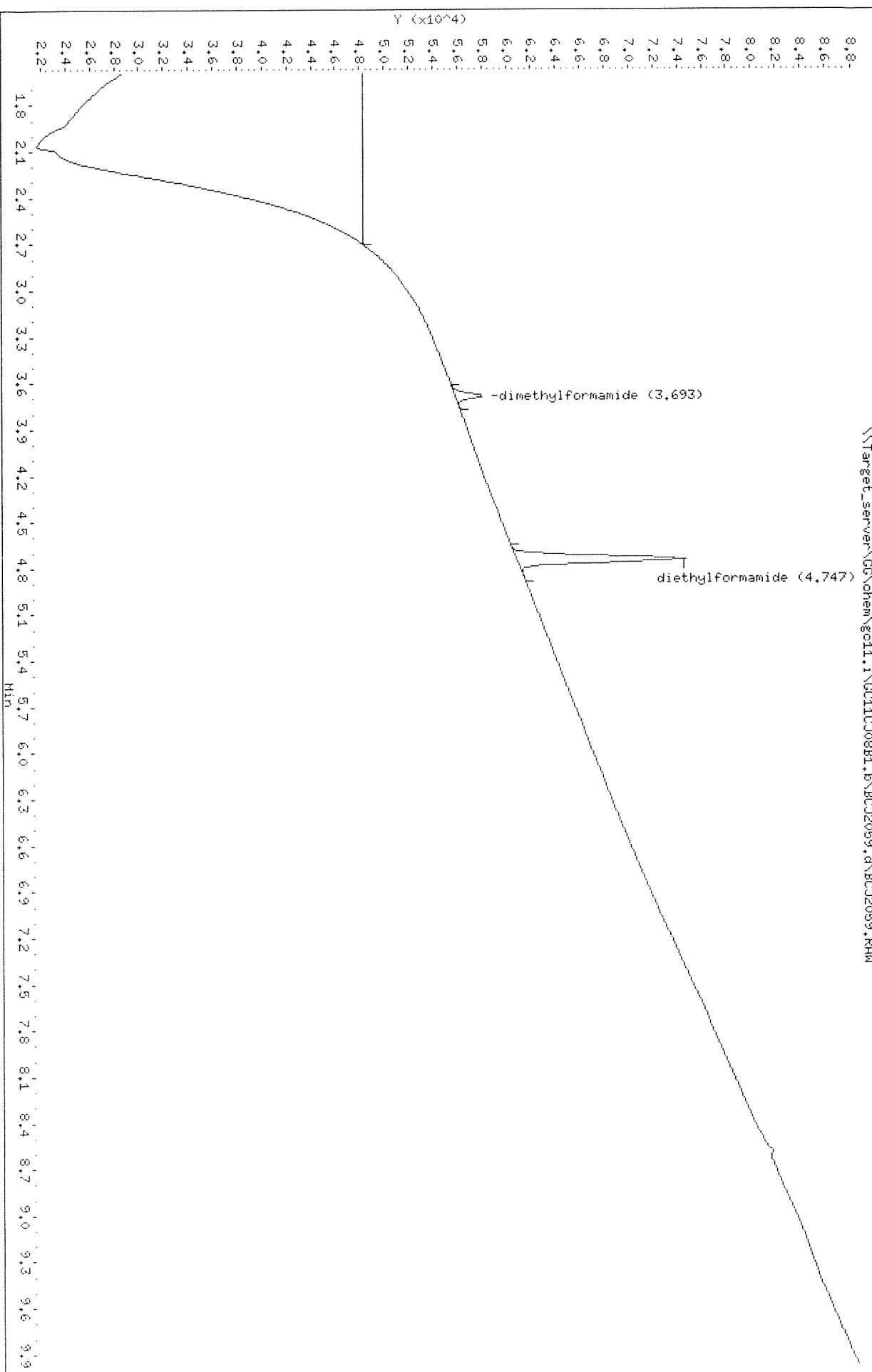
Compounds	AMOUNTS						REVIEW CODE
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT	ON-COL	
					( mg/L)	( mg/L)	
1 dimethylformamide	3.693	3.707	-0.014	5578	0.02000	0.0160 (aM)	M2
\$ 2 diethylformamide	4.746	4.760	-0.014	40915	0.25000	0.239 (M)	

QC Flag Legend

a - Target compound detected but, quantitated amount  
Below Limit Of Quantitation(BLOQ).  
M - Compound response manually integrated.

Data File: \\Target\_server\\GC\\chem\\gc11.i\\GC1CJ08B1.b\\BCJ2059.d  
Date : 08-OCT-2009 10:42  
Client ID:  
Sample Info: DMFB040A.M,GC1CJ08B1.B,1,ICAL 0.02  
Purge Volume: 0.0  
Column Phase: ZB-WAX

Instrument: gc11.i  
Operator: JLP  
Column diameter: 0.53  
\\Target\_server\\GC\\chem\\gc11.i\\GC1CJ08B1.b\\BCJ2059.RAW



Data File: \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2060.d  
Report Date: 09-Oct-2009 10:23

Katahdin Analytical Services

Data file : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2060.d  
Lab Smp Id: ICAL 0.05  
Inj Date : 08-OCT-2009 10:57  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB040A.M, GC11CJ08B1.B, 1, ICAL 0.05  
Misc Info :  
Comment :  
Method : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\DMFB040A.m  
Meth Date : 09-Oct-2009 10:22 jprescott Quant Type: ESTD  
Cal Date : 08-OCT-2009 10:57 Cal File: BCJ2060.RAW  
Als bottle: 1 Calibration Sample, Level: 2  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12  
Processing Host: V200T2

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	FinalVolume (L)
Vo	0.00100	SampleVolume (L)
Cpnd Variable		Local Compound Variable

Compounds	AMOUNTS						REVIEW CODE
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT	ON-COL	
	====	=====	=====	=====	=====	=====	
1 dimethylformamide	3.706	3.707	-0.001	11606	0.05000	0.0781 (M)	M2
\$ 2 diethylformamide	4.760	4.760	0.000	91554	0.50000	0.509	

QC Flag Legend

M - Compound response manually integrated.

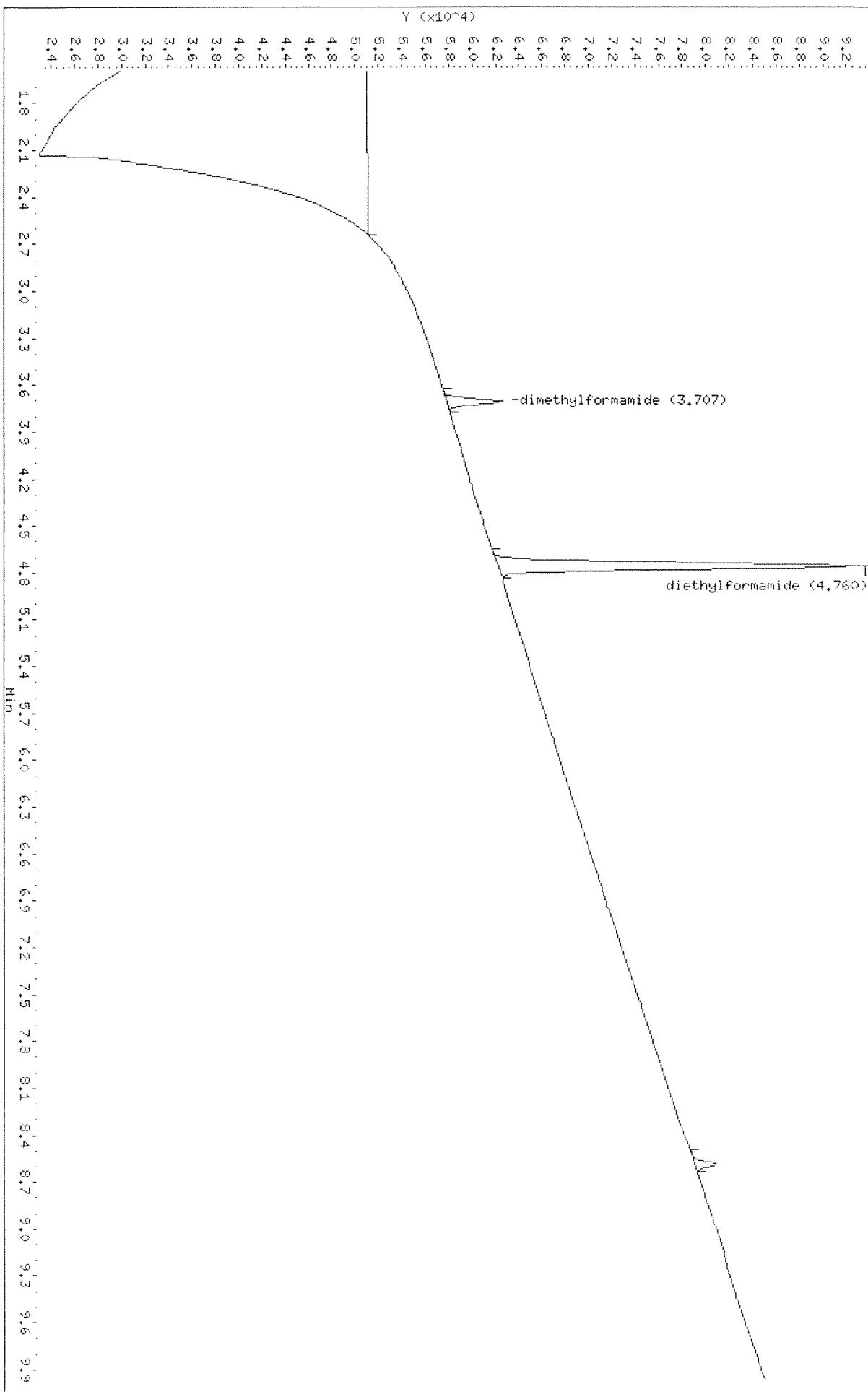
JLP  
10/09/09

Data File: \\Target\_server\GG\chem\gc11.i\GC1CJ08B4.b\BCJ2060.d  
Date : 08-OCT-2009 10:57  
Client ID:  
Sample Info: DMFB40A.M,GC1CJ08B4.B,1,ICAL 0.05  
Purge Volume: 0.0

Column phase: ZB-WAX

Instrument: gc11.i  
Operator: JLP  
Column diameter: 0.53

\\Target\_server\GG\chem\gc11.i\GC1CJ08B4.b\BCJ2060.d\BCJ2060.RAW



Data File: \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2061.d  
Report Date: 09-Oct-2009 10:23

Katahdin Analytical Services

Data file : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2061.d  
Lab Smp Id: ICAL 0.1  
Inj Date : 08-OCT-2009 11:11  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB040A.M, GC11CJ08B1.B, 1, ICAL 0.1  
Misc Info :  
Comment :  
Method : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\DMFB040A.m  
Meth Date : 09-Oct-2009 10:22 jprescott Quant Type: ESTD  
Cal Date : 08-OCT-2009 11:11 Cal File: BCJ2061.RAW  
Als bottle: 1 Calibration Sample, Level: 3  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12  
Processing Host: V200T2

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	FinalVolume (L)
Vo	0.00100	SampleVolume (L)
Cpnd Variable		Local Compound Variable

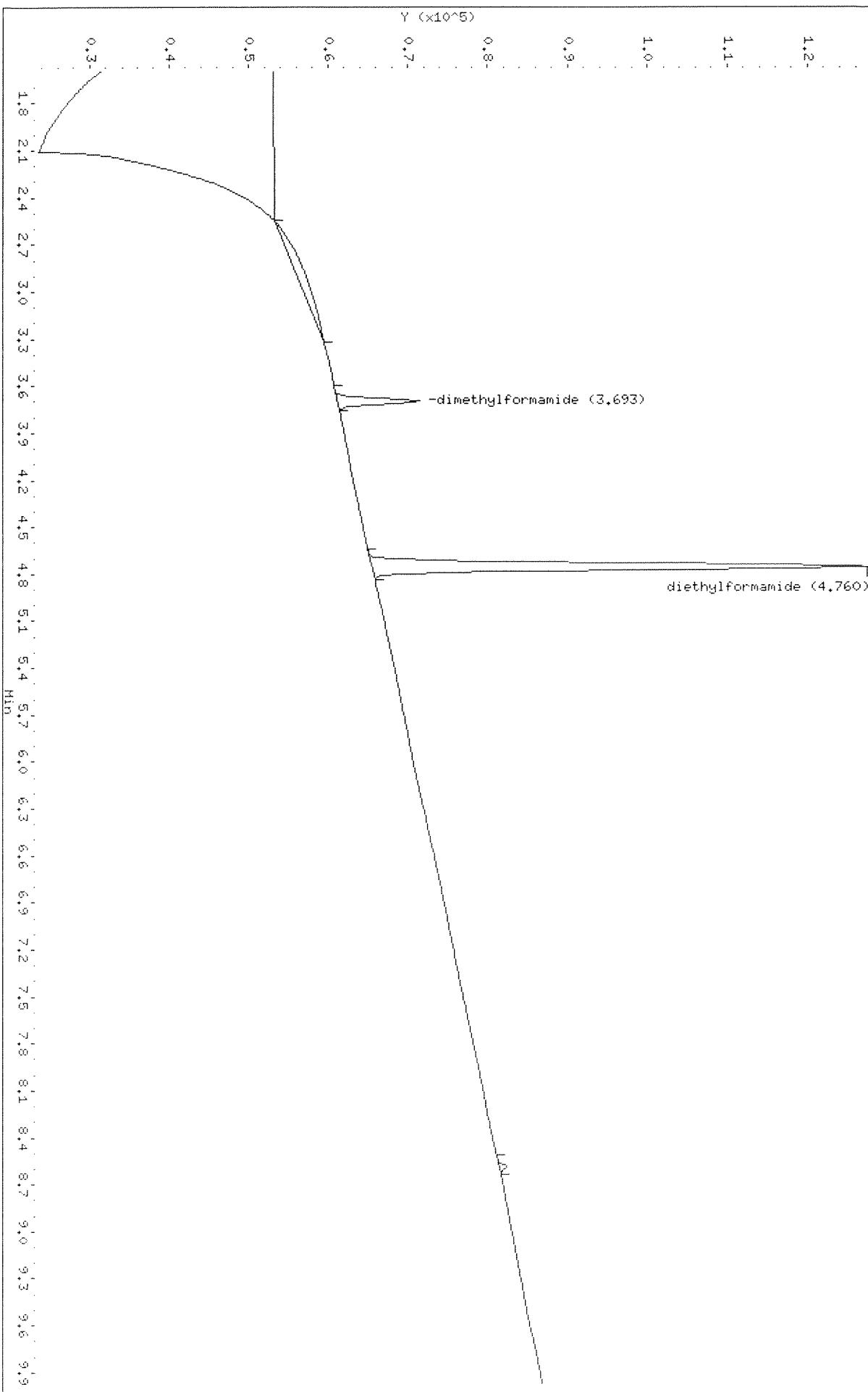
Compounds	AMOUNTS						REVIEW CODE
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT	ON-COL	
	=====	=====	=====	=====	=====	=====	
1 dimethylformamide	3.693	3.707	-0.014	26284	0.10000	0.106	=====
\$ 2 diethylformamide	4.760	4.760	0.000	186958	1.00000	1.02	=====

Data File: \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2061.d  
Date : 08-OCT-2009 11:11  
Client ID:  
Sample Info.: DMFB040A.M,GC11CJ08B1.B,1,ICAL 0.1

Purge Volume: 0.0  
Column Phase: ZB-WAX

Instrument: gc11.i  
Operator: JLP  
Column diameter: 0.53

\\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2061.d\BCJ2061.RAW



Data File: \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2063.d  
Report Date: 09-Oct-2009 10:23

Katahdin Analytical Services

Data file : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2063.d  
Lab Smp Id: ICAL 0.25  
Inj Date : 08-OCT-2009 11:40  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB040A.M,GC11CJ08B1.B,1,ICAL 0.25  
Misc Info :  
Comment :  
Method : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\DMFB040A.m  
Meth Date : 09-Oct-2009 10:22 jprescott Quant Type: ESTD  
Cal Date : 08-OCT-2009 11:40 Cal File: BCJ2063.RAW  
Als bottle: 1 Calibration Sample, Level: 4  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12  
Processing Host: V200T2

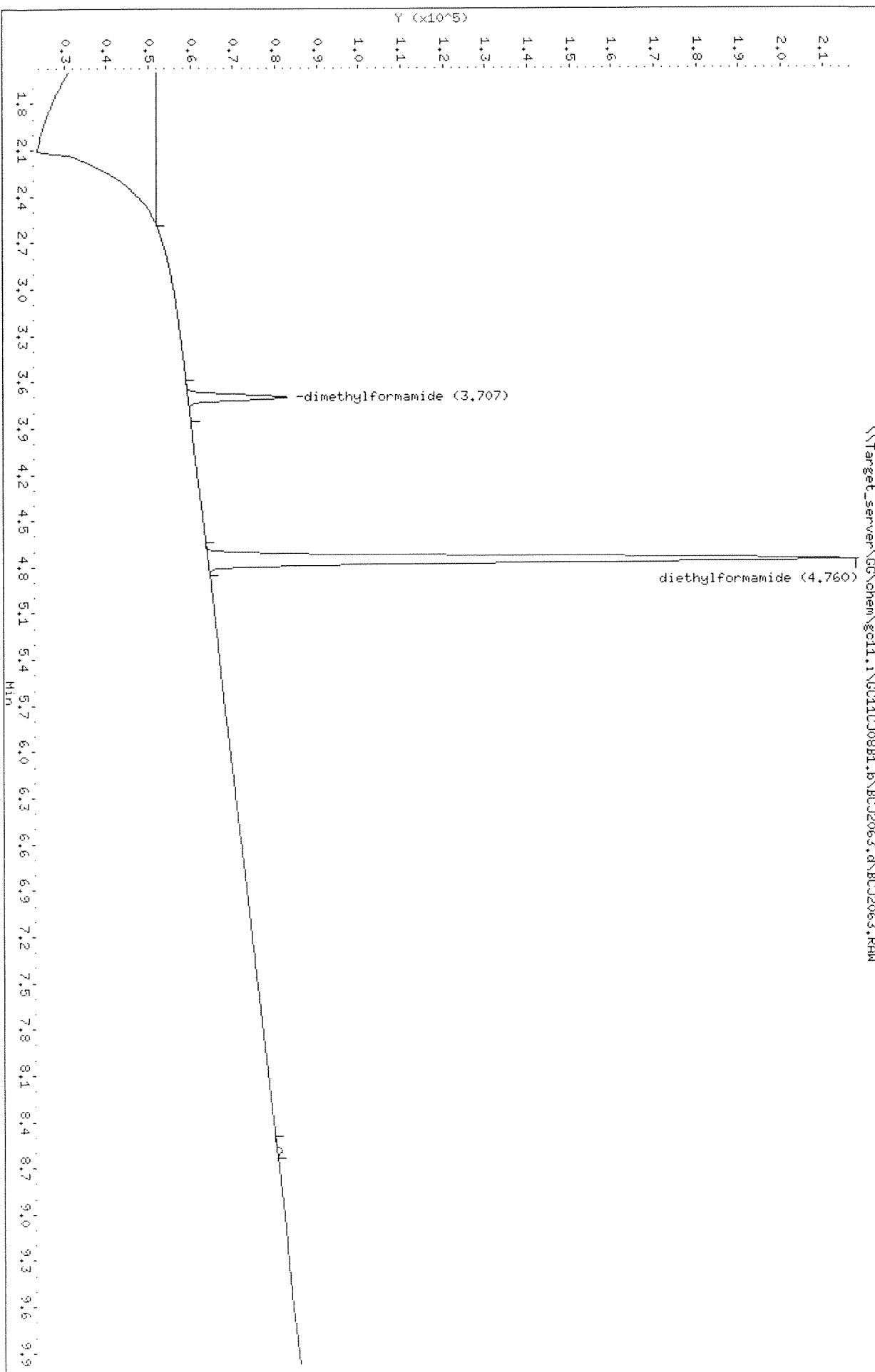
Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	FinalVolume (L)
Vo	0.00100	SampleVolume (L)
Cpnd Variable		Local Compound Variable

Compounds	AMOUNTS						REVIEW CODE
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT	ON-COL	
	( mg/L)	( mg/L)					
\$ 2 diethylformamide	4.760	4.760	0.000	455973	2.50000	2.50	

Data File: \\Target\_server\GG\chem\gc11.i\GC1CJ08B1.b\BCJ2063.d  
Date : 08-OCT-2009 11:40  
Client ID:  
Sample Info: DMFB040A.M,GC1CJ08B1.B,1,ICAL 0.25  
Purge Volume: 0.0  
Column Phase: ZB-WAX

Instrument: gc11.i  
Operator: JLP  
Column diameter: 0.53  
\\Target\_server\GG\chem\gc11.i\GC1CJ08B1.b\BCJ2063.d\BCJ2063.RAW



Data File: \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2068.d  
Report Date: 09-Oct-2009 10:23

Katahdin Analytical Services

Data file : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2068.d  
Lab Smp Id: ICAL 1.0  
Inj Date : 08-OCT-2009 12:51  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB040A.M, GC11CJ08B1.B, 1, ICAL 1.0  
Misc Info :  
Comment :  
Method : \\\TARGET SERVER\GG\chem\gc11.i\GC11CJ08B1.B\DMFB040A.m  
Meth Date : 09-Oct-2009 10:22 jprescott Quant Type: ESTD  
Cal Date : 08-OCT-2009 12:51 Cal File: BCJ2068.d  
Als bottle: 1 Calibration Sample, Level: 6  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12  
Processing Host: V200T2

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	FinalVolume (L)
Vo	0.00100	SampleVolume (L)
Cpnd Variable		Local Compound Variable

Compounds	AMOUNTS						REVIEW CODE
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT	ON-COL	
	( mg/L)	( mg/L)					
1 dimethylformamide	3.693	3.707	-0.014	218911	1.00000	0.932 (M)	M4

QC Flag Legend

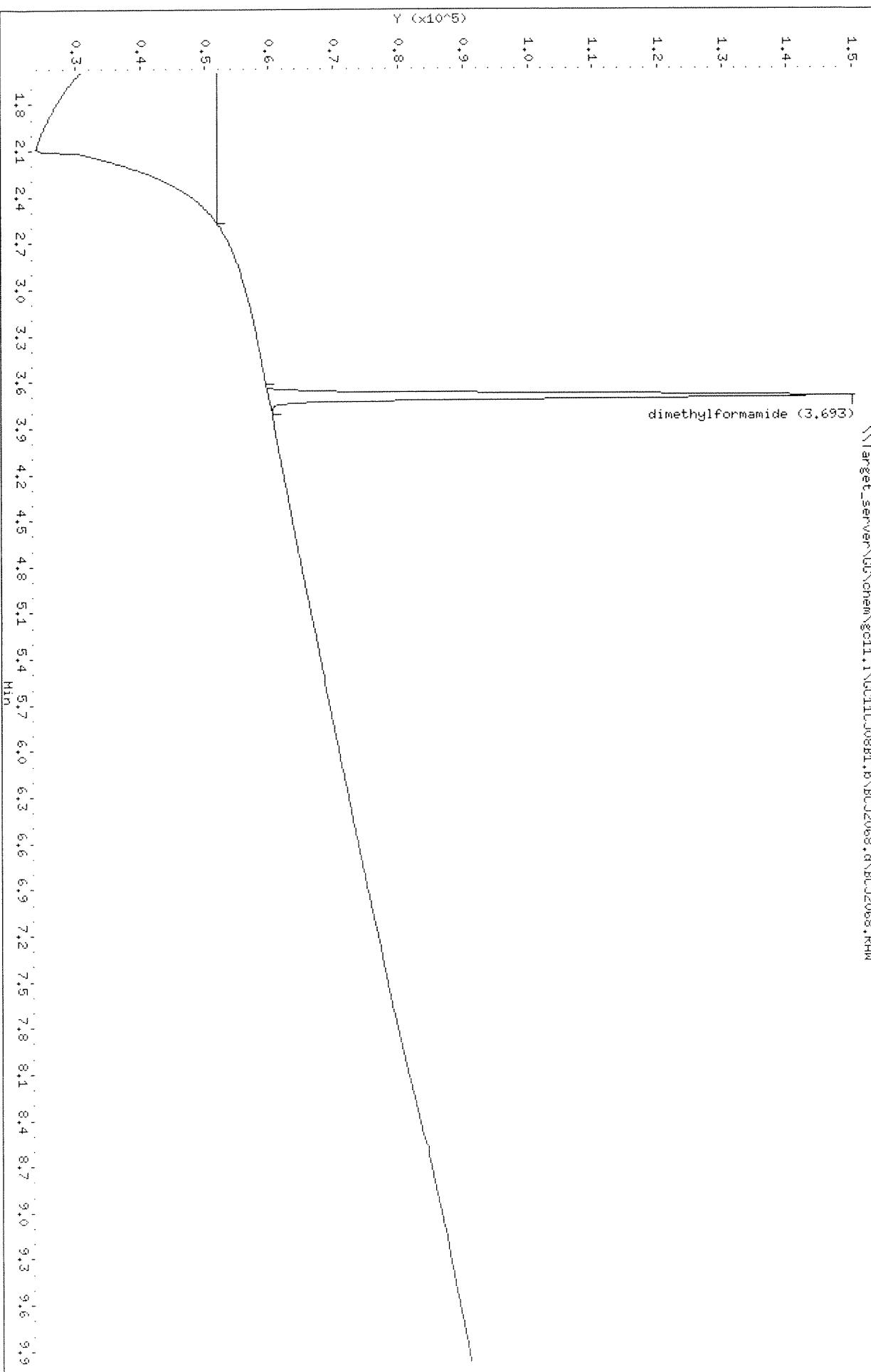
M - Compound response manually integrated.

Data File: \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2068.d  
Date : 08-OCT-2009 12:51  
Client ID:  
Sample Info: DMF040A.M\GC11CJ08B1.R,1,ICAL 1.0

Purge Volume: 0.0  
Column Phase: ZB-WAX

Instrument: gc11.i  
Operator: JLP  
Column diameter: 0.53

\\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2068.d\BCJ2068.RAW



Data File: \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2072.d  
Report Date: 09-Oct-2009 10:23

Katahdin Analytical Services

Data file : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2072.d  
Lab Smp Id: ICAL 0.5  
Inj Date : 08-OCT-2009 13:48  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB040A.M,GC11CJ08B1.B,1,ICAL 0.5  
Misc Info :  
Comment :  
Method : \\\TARGET\_SERVER\GG\chem\gc11.i\GC11CJ08B1.B\DMFB040A.m  
Meth Date : 09-Oct-2009 10:22 jprescott Quant Type: ESTD  
Cal Date : 08-OCT-2009 13:48 Cal File: BCJ2072.d  
Als bottle: 1 Calibration Sample, Level: 5  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12  
Processing Host: V200T2

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	FinalVolume (L)
Vo	0.00100	SampleVolume (L)
Cpnd Variable		Local Compound Variable

Compounds	AMOUNTS						REVIEW CODE
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT	ON-COL	
					( mg/L)	( mg/L)	
1 dimethylformamide	3.680	3.707	-0.027	108466	0.50000	0.490	
\$ 2 diethylformamide	4.746	4.760	-0.014	759669	4.00000	4.04 (A)	

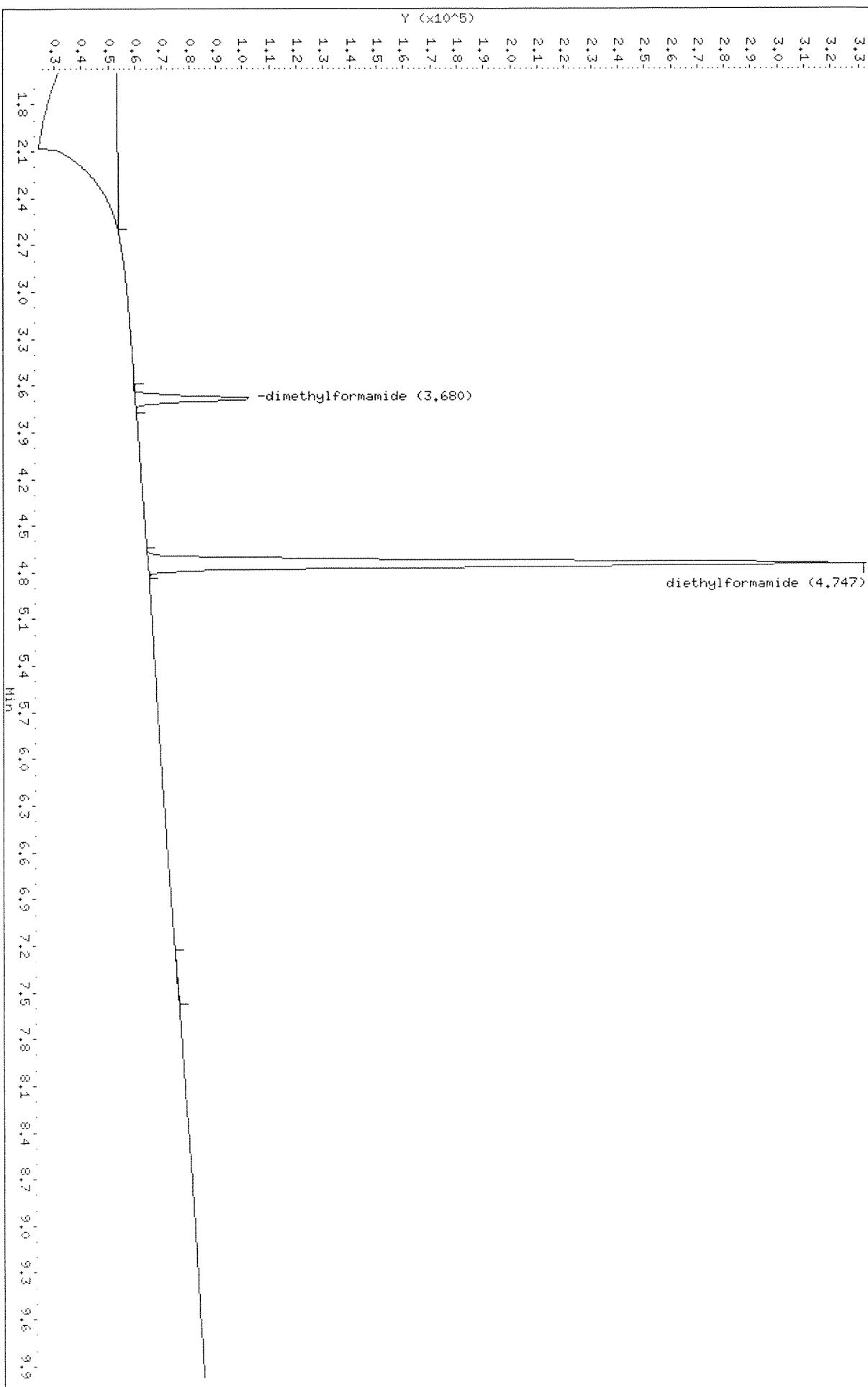
QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\Target\_server\GC\chem\gc11.i\GC11CJ08B1.b\BCJ2072.d  
Date : 08-OCT-2009 13:48  
Client ID:  
Sample Info: DMFB040A.M,GC11CJ08B1.B,1,ICAL 0.5  
Purge Volume: 0.0  
Column phase: ZB-WAX

\\Target\_server\GC\chem\gc11.i\GC11CJ08B1.b\BCJ2072.d\BCJ2072.RAW

Instrument: gc11.i  
Operator: JLP  
Column diameter: 0.53



FORM 7B  
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: WILMINGTON SDG No.: WIL-7

Instrument ID: GC11 Calibration Date: 09/15/09 Time: 1435

Lab File ID: BCI4094 Init. Calib. Date(s): 09/15/09 09/15/09

Init. Calib. Times: 0936 1143

GC Column: ZB-WAX ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF0.2500 or AMOUNT	CCAL RRF0.2500	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV
dimethylformamide	0.2084400	0.2500000	41392.000	0.01	-16.62	25.00	LINR
diethylformamide	2.4826000	2.5000000	65813.000	0.01	-0.70	25.00	LINR

FORM VII PEST

Data File: \\Target\_server\GG\chem\gc11.i\GC11CI15A1.b\BCI4094.d  
Report Date: 09-Oct-2009 10:23

Katahdin Analytical Services

Data file : \\Target\_server\GG\chem\gc11.i\GC11CI15A1.b\BCI4094.d  
Lab Smp Id: CV 0.25  
Inj Date : 15-SEP-2009 14:35  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB038A.M,GC11CI15A1.B,1,CV 0.25  
Misc Info : CV  
Comment :  
Method : \\\TARGET\_SERVER\GG\chem\gc11.i\GC11CI15A1.B\DMFB038A.m  
Meth Date : 09-Oct-2009 10:22 jprescott Quant Type: ESTD  
Cal Date : 15-SEP-2009 11:43 Cal File: BCI4082.d  
Als bottle: 1 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12  
Processing Host: V200T2

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	FinalVolume (L)
Vo	0.00100	SampleVolume (L)
Cpnd Variable		Local Compound Variable

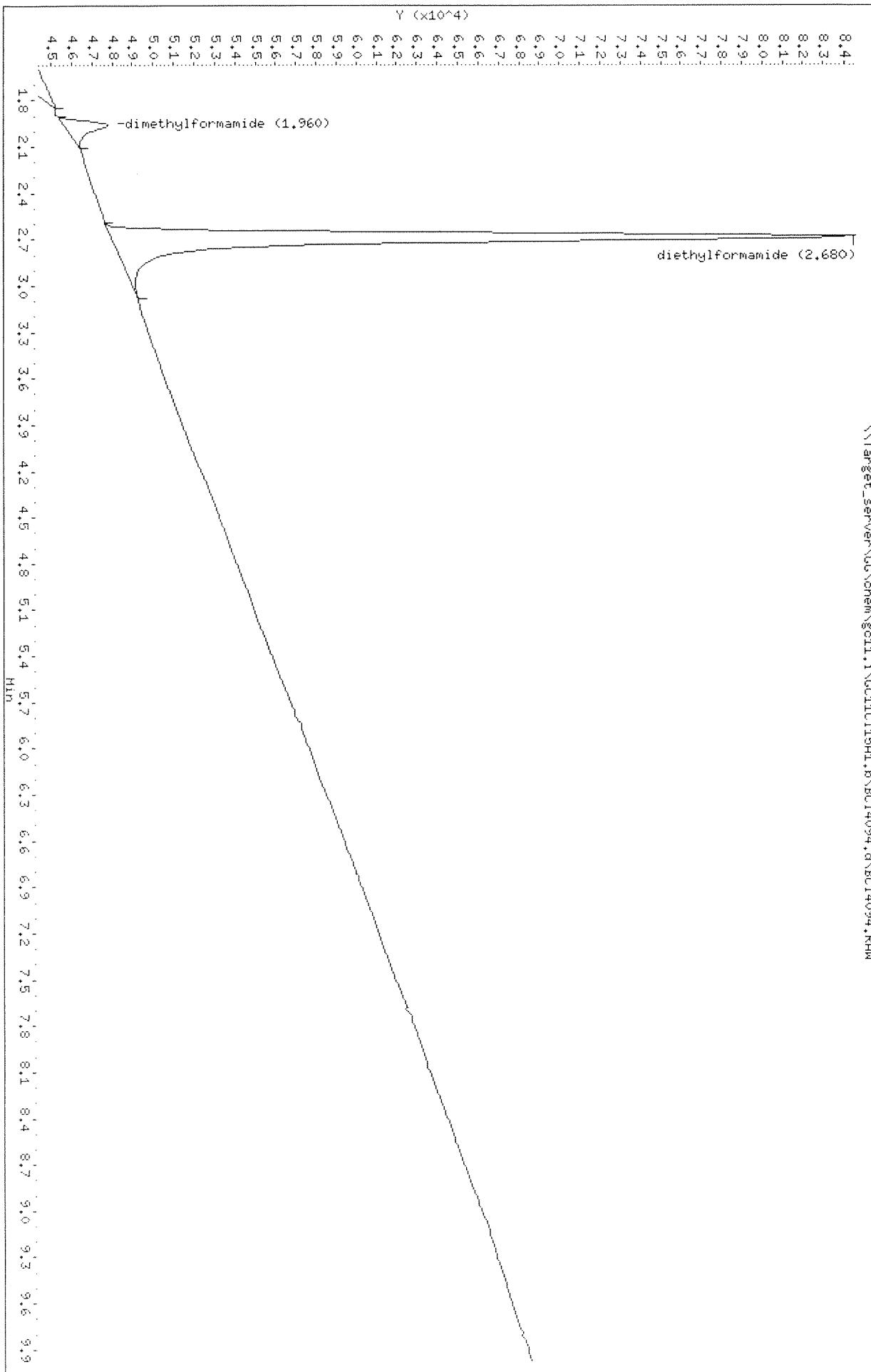
Compounds	AMOUNTS						REVIEW CODE
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT	ON-COL	
	( mg/L)	( mg/L)					
1 dimethylformamide	1.960	1.960	0.000	10348	0.25000	0.208 (M)	M5
\$ 2 diethylformamide	2.680	2.680	0.000	164533	2.50000	2.48 (M)	

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Target\_server\\GC\\chem\\gc11.i\\GC11C115A1.b\\BC14094.d  
Date : 15-SEP-2009 14:35  
Client ID:  
Sample Info: DMFB38A.H,GC11C115A1.B,1,CW 0.25

Purge Volume: 0.0  
Column Phase: ZB-WAX  
  
Instrument: gc11.i  
Operator: JLP  
Column diameter: 0.53  
  
\\Target\_server\\GC\\chem\\gc11.i\\GC11C115A1.b\\BC14094.d\\BC14094.RAW



FORM 7B  
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: WILMINGTON SDG No.: WIL-7

Instrument ID: GC11 Calibration Date: 09/23/09 Time: 0852

Lab File ID: BCI6062 Init. Calib. Date(s): 09/15/09 09/15/09

Init. Calib. Times: 0936 1143

GC Column: ZB-WAX ID: 0.53 (mm)

COMPOUND	RRF0.2500		CCAL	MIN	%D or %DRIFT	MAX %D or %DRIFT	CURV
	RRF or AMOUNT	or AMOUNT					
dimethylformamide	0.2015400	0.2500000	39868.000	0.01	-19.38	25.00	LINR
diethylformamide	2.3109000	2.5000000	61071.000	0.01	-7.56	25.00	LINR

FORM VII PEST

Data File: \\Target\_server\GG\chem\gc11.i\GC11CI23A1.b\BCI6062.d  
Report Date: 09-Oct-2009 10:23

Katahdin Analytical Services

Data file : \\Target\_server\GG\chem\gc11.i\GC11CI23A1.b\BCI6062.d  
Lab Smp Id: CV 0.25  
Inj Date : 23-SEP-2009 08:52  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB038A.M,GC11CI23A1.B,1,CV 0.25  
Misc Info : CV  
Comment :  
Method : \\\TARGET\_SERVER\GG\chem\gc11.i\GC11CI23A1.B\DMFB038A.m  
Meth Date : 09-Oct-2009 10:22 jprescott Quant Type: ESTD  
Cal Date : 15-SEP-2009 11:43 Cal File: BCI4082.d  
Als bottle: 1 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12  
Processing Host: V200T2

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	FinalVolume (L)
Vo	0.00100	SampleVolume (L)
Cpnd Variable		Local Compound Variable

Compounds	AMOUNTS						REVIEW CODE
	RT	EXP RT	DL/T	RT	RESPONSE	CAL- AMT	
	( mg/L)	( mg/L)				=====	
1 dimethylformamide	1.960	1.960	0.000		9967	0.25000	0.202(M)
2 diethylformamide	2.680	2.680	0.000		152677	2.50000	2.31(M)

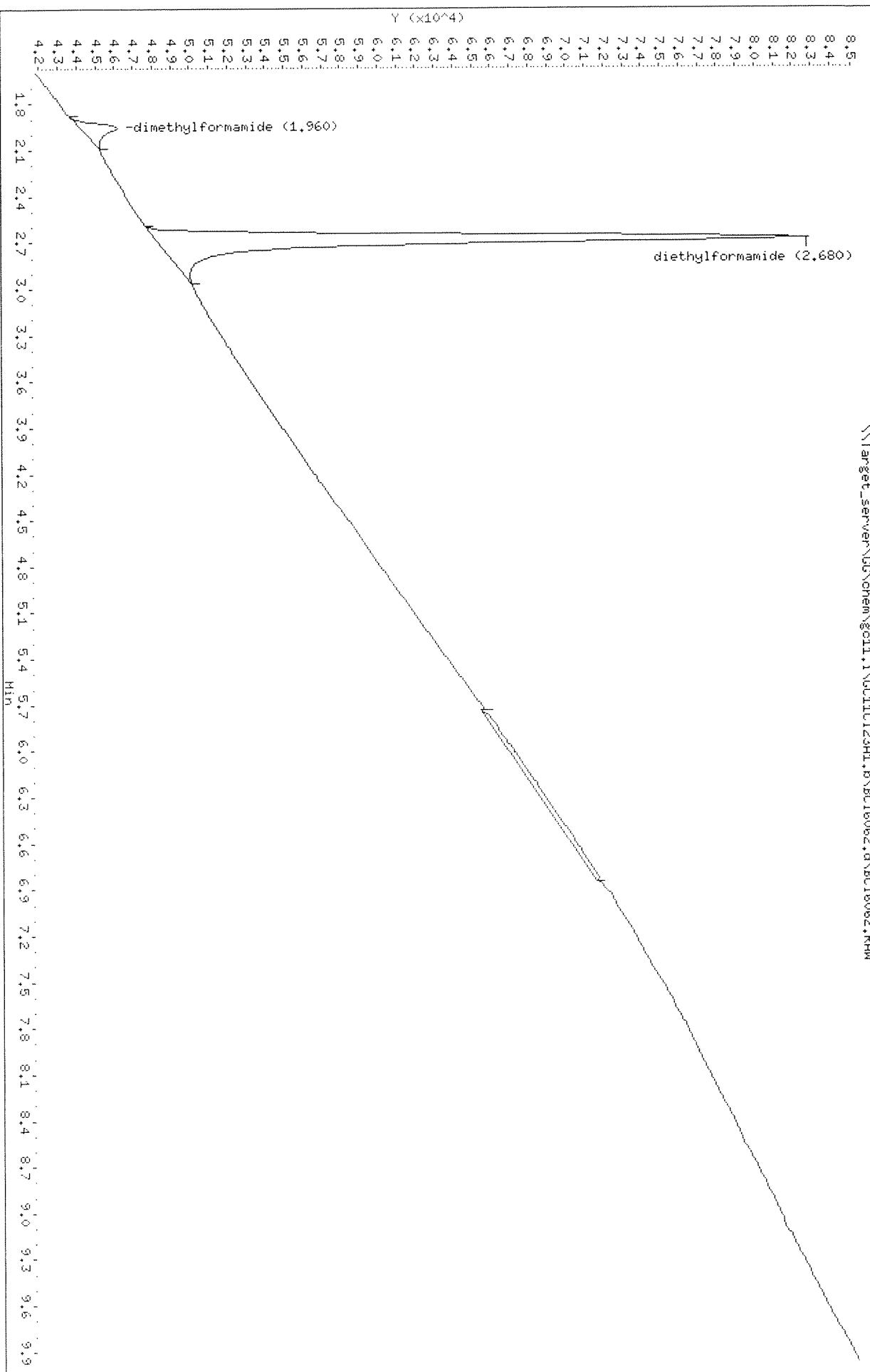
QC Flag Legend

M - Compound response manually integrated.

Data File: \\Target\_server\\GC\\chem\\gc11.i\\GC11C123A1.b\\BC16062.d  
Date : 23-SEP-2009 08:52  
Client ID:  
Sample Info: DMFB038A.M,GC11C123A1.B,1,CW 0.25  
Purge Volume: 0.0  
Column phase: ZB-WAX

Instrument: gc11.i  
Operator: JLP  
Column diameter: 0.53

\\Target\_server\\GC\\chem\\gc11.i\\GC11C123A1.b\\BC16062.d\\BC16062.RAW



FORM 7B  
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: WILMINGTON SDG No.: WIL-7

Instrument ID: GC11 Calibration Date: 09/23/09 Time: 1212

Lab File ID: BCI6076 Init. Calib. Date(s): 09/15/09 09/15/09

Init. Calib. Times: 0936 1143

GC Column: ZB-WAX ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF0.2500 or AMOUNT	CCAL RRF0.2500	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV	TYPE
dimethylformamide	0.1692400	0.2500000	32732.000	0.01	-32.30	25.00	LINR	<
diethylformamide	1.8903000	2.5000000	49452.000	0.01	-24.39	25.00	LINR	=

FORM VII PEST

Data File: \\Target\_server\GG\chem\gc11.i\GC11CI23A1.b\BCI6076.d  
Report Date: 09-Oct-2009 10:23

Katahdin Analytical Services

Data file : \\Target\_server\GG\chem\gc11.i\GC11CI23A1.b\BCI6076.d  
Lab Smp Id: CV 0.25  
Inj Date : 23-SEP-2009 12:12  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB038A.M, GC11CI23A1.B, 1, CV 0.25  
Misc Info : CV  
Comment :  
Method : \\\TARGET\_SERVER\GG\chem\gc11.i\GC11CI23A1.B\DMFB038A.m  
Meth Date : 09-Oct-2009 10:22 jprescott Quant Type: ESTD  
Cal Date : 15-SEP-2009 11:43 Cal File: BCI4082.d  
Als bottle: 1 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12  
Processing Host: V200T2

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	FinalVolume (L)
Vo	0.00100	SampleVolume (L)
Cpnd Variable		Local Compound Variable

Compounds	AMOUNTS						REVIEW CODE
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT	ON-COL	
	( mg/L)	( mg/L)					
1 dimethylformamide	1.960	1.960	0.000	8183	0.25000	0.169 (M)	M2
2 diethylformamide	2.680	2.680	0.000	123630	2.50000	1.89 (M)	<i>348 1000112</i>

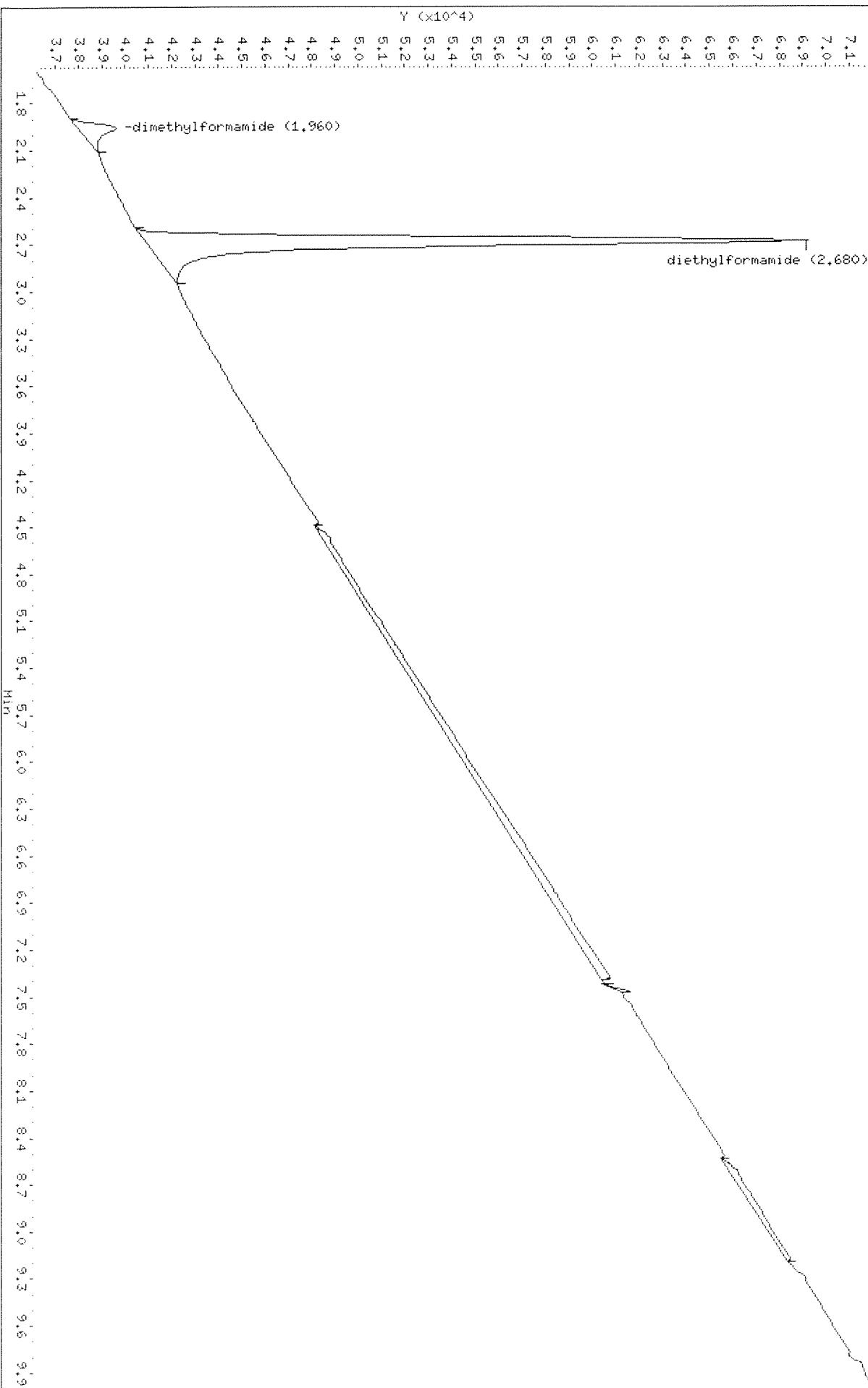
QC Flag Legend

M - Compound response manually integrated.

Data File: \\Target\_server\GC\chem\gc11.i\GC11C123A1.b\BC16076.d  
Date : 23-SEP-2009 12:12  
Client ID:  
Sample Info: DMFB038A.M,GC11C123A1.B,1,CV 0.25  
Purge Volume: 0.0  
Column phase: ZB-WAX

Instrument: gc11.i  
Operator: JLP  
Column diameter: 0.53

\\Target\_server\GC\chem\gc11.i\GC11C123A1.b\BC16076.d\BC16076.RAW



FORM 7B  
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: WILMINGTON SDG No.: WIL-7

Instrument ID: GC11 Calibration Date: 10/08/09 Time: 1847

Lab File ID: BCJ2089 Init. Calib. Date(s): 10/08/09 10/08/09

Init. Calib. Times: 1042 1348

GC Column: ZB-WAX ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF0.2500 or AMOUNT	CCAL RRF0.2500	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
dimethylformamide	0.2272700	0.2500000	205790.00	0.01	-9.09	25.00	LINR
diethylformamide	2.2377000	2.5000000	167640.00	0.01	-10.49	25.00	LINR

FORM VII PEST

Data File: \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2089.d  
Report Date: 09-Oct-2009 10:23

Katahdin Analytical Services

Data file : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2089.d  
Lab Smp Id: CV 0.25  
Inj Date : 08-OCT-2009 18:47  
Operator : KT Inst ID: gc11.i  
Smp Info : DMFB040A.M,GC11CJ08B1.B,1,CV 0.25  
Misc Info : CV  
Comment :  
Method : \\\TARGET\_SERVER\GG\chem\gc11.i\GC11CJ08B1.B\DMFB040A.m  
Meth Date : 09-Oct-2009 10:22 jprescott Quant Type: ESTD  
Cal Date : 08-OCT-2009 13:48 Cal File: BCJ2072.d  
Als bottle: 1 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12  
Processing Host: V200T2

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	FinalVolume (L)
Vo	0.00100	SampleVolume (L)
Cpnd Variable		Local Compound Variable

Compounds	AMOUNTS						REVIEW CODE
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT	ON-COL	
	( mg/L)	( mg/L)					
1 dimethylformamide	3.693	3.707	-0.014	51448	0.25000	0.227 (M)	M4
\$ 2 diethylformamide	4.746	4.760	-0.014	419093	2.50000	2.24	

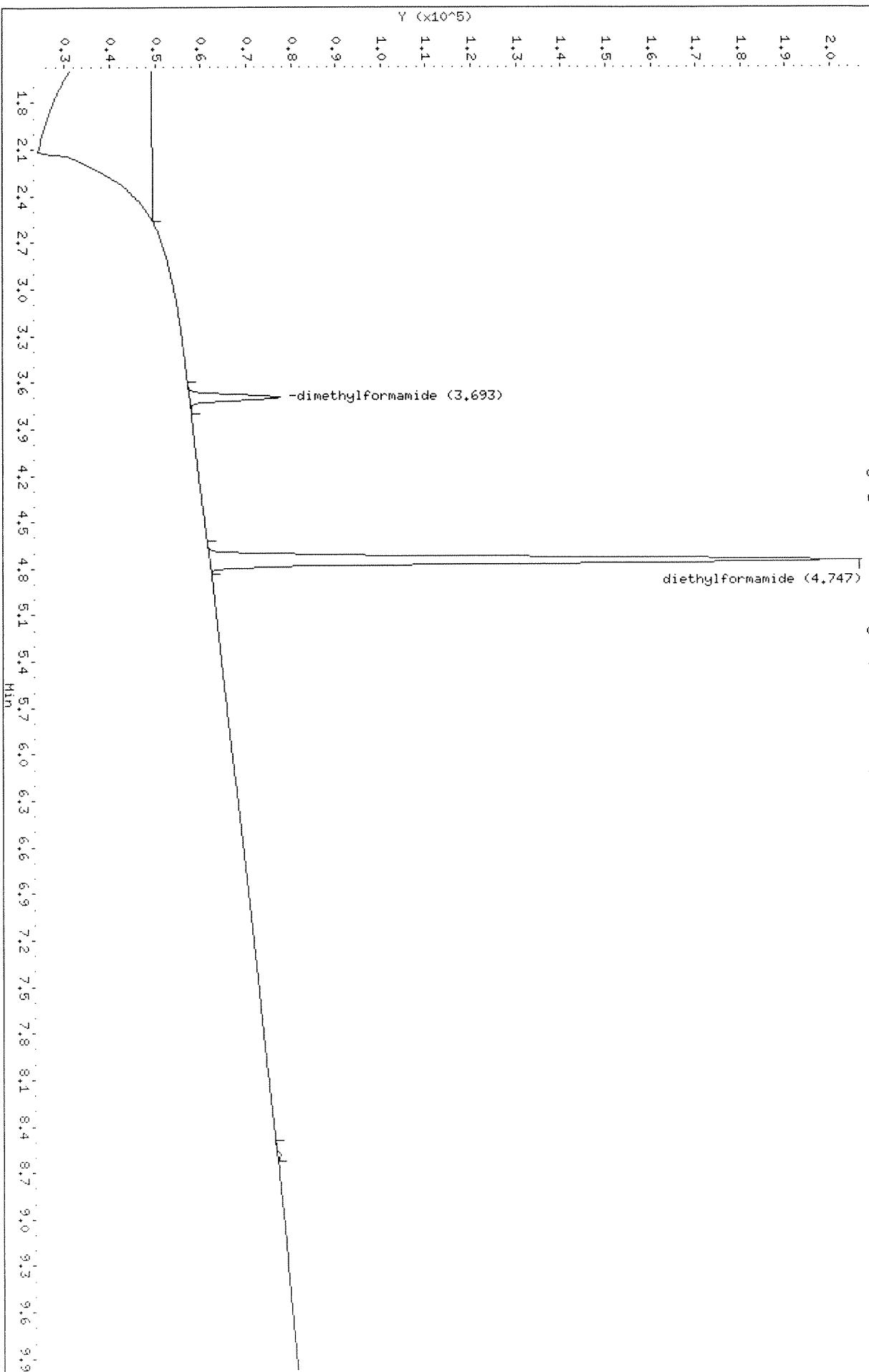
QC Flag Legend

M - Compound response manually integrated.

Data File: \\Target\_server\GC\chem\gc11.i\GC11CJ08B1.b\BCJ2089.d  
Date : 08-OCT-2009 18:47  
Client ID:  
Sample Info: DMFB040A.H,GC11CJ08B1.B,1,CW 0.25  
Purge Volume: 0.0  
Column Phase: ZB-WAX

Instrument: gc11.i  
Operator: KT  
Column diameter: 0.53

\\Target\_server\GC\chem\gc11.i\GC11CJ08B1.b\BCJ2089.d\BCJ2089.RAW



FORM 7B  
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: WILMINGTON SDG No.: WIL-7

Instrument ID: GC11 Calibration Date: 10/08/09 Time: 2141

Lab File ID: BCJ2101 Init. Calib. Date(s): 10/08/09 10/08/09

Init. Calib. Times: 1042 1348

GC Column: ZB-WAX ID: 0.53 (mm)

COMPOUND	RRF or AMOUNT	RRF0.2500 or AMOUNT	CCAL RRF0.2500	MIN RRF	%D or %DRIFT	MAX %D or %DRIFT	CURV TYPE
dimethylformamide	0.2173100	0.2500000	197140.00	0.01	-13.08	25.00	LINR
diethylformamide	2.0864000	2.5000000	156190.00	0.01	-16.54	25.00	LINR

FORM VII PEST

Data File: \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2101.d  
Report Date: 09-Oct-2009 10:23

Katahdin Analytical Services

Data file : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2101.d  
Lab Smp Id: CV 0.25  
Inj Date : 08-OCT-2009 21:41  
Operator : KT Inst ID: gc11.i  
Smp Info : DMFB040A.M, GC11CJ08B1.B, 1, CV 0.25  
Misc Info : CV  
Comment :  
Method : \\\TARGET\_SERVER\GG\chem\gc11.i\GC11CJ08B1.B\DMFB040A.m  
Meth Date : 09-Oct-2009 10:22 jprescott Quant Type: ESTD  
Cal Date : 08-OCT-2009 13:48 Cal File: BCJ2072.d  
Als bottle: 1 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12  
Processing Host: V200T2

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	FinalVolume (L)
Vo	0.00100	SampleVolume (L)
Cpnd Variable		Local Compound Variable

Compounds	AMOUNTS						REVIEW CODE
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT	ON-COL	
1 dimethylformamide	3.706	3.707	-0.001	49286	0.25000	0.217(M)	MS
\$ 2 diethylformamide	4.746	4.760	-0.014	390465	2.50000	2.09	

*JW  
10/09/09*

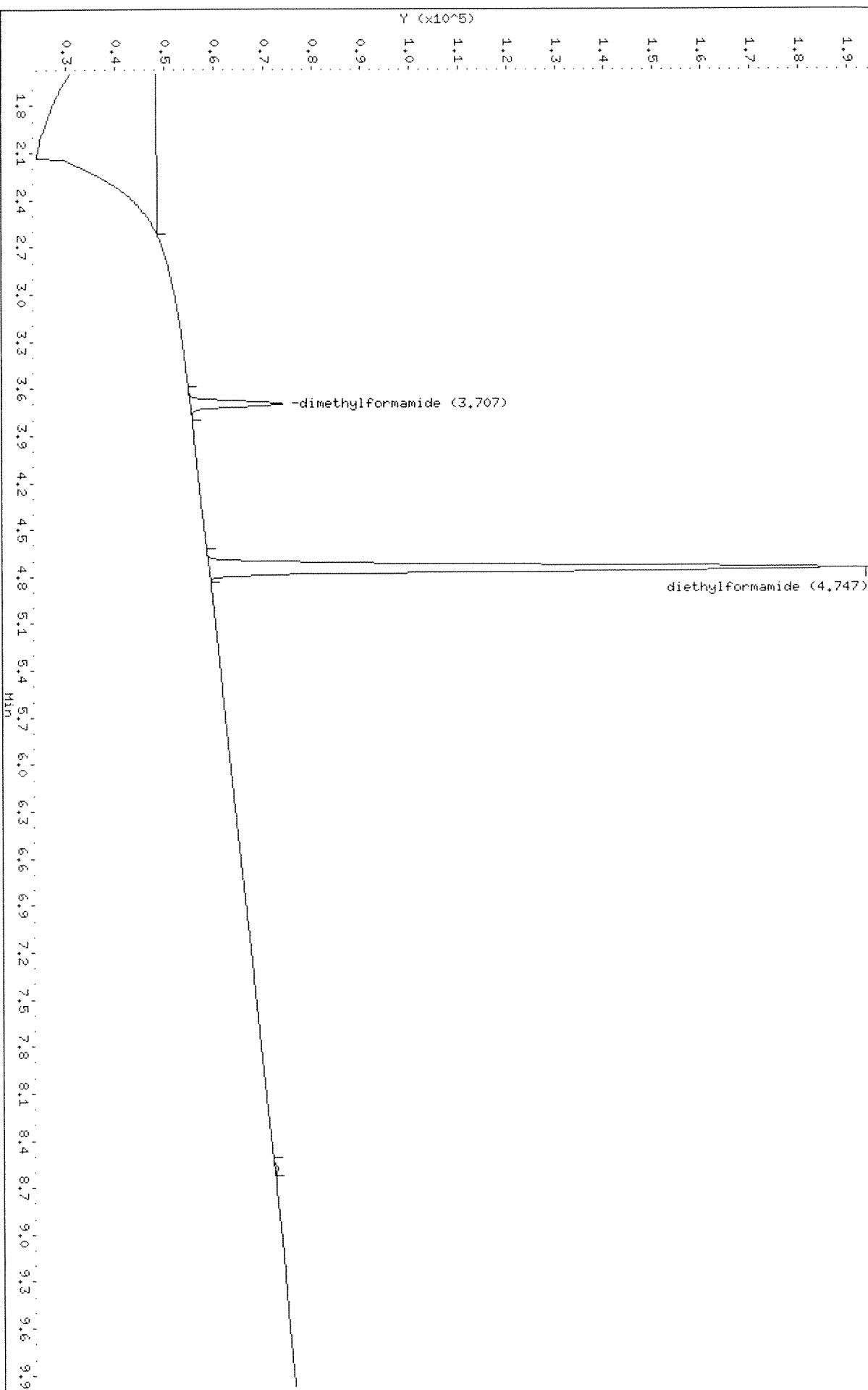
QC Flag Legend

M - Compound response manually integrated.

Data File: \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2101.d  
Date : 08-OCT-2009 21:44  
Client ID:  
Sample Info: DMFB040A.M,GC11CJ08B1.B,1,CW 0.25  
Purge Volume: 0.0  
Column phase: ZB-WAX

Instrument: gc11.i  
Operator: KT  
Column diameter: 0.53

\\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2101.d\BCJ2101.RAW



FORM 7B  
VOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: KATAHDIN ANALYTICAL SERVICES Lab Code: KAS

Project: WILMINGTON SDG No.: WIL-7

Instrument ID: GC11 Calibration Date: 10/09/09 Time: 0021

Lab File ID: BCJ2112 Init. Calib. Date(s): 10/08/09 10/08/09

Init. Calib. Times: 1042 1348

GC Column: ZB-WAX ID: 0.53 (mm)

COMPOUND	RRF or	RRF0.2500	CCAL	MIN	%D or	MAX %D or	CURV
	AMOUNT	AMOUNT	RRF0.2500	RRF	%DRIFT	%DRIFT	TYPE
dimethylformamide	0.1929600	0.2500000	175990.00	0.01	-22.82	25.00	LINR
diethylformamide	1.6930000	2.5000000	126400.00	0.01	-32.28	25.00	LINR

FORM VII PEST

Data File: \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2112.d  
Report Date: 09-Oct-2009 10:23

Katahdin Analytical Services

Data file : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2112.d  
Lab Smp Id: CV 0.25  
Inj Date : 09-OCT-2009 00:21  
Operator : KT Inst ID: gc11.i  
Smp Info : DMFB040A.M,GC11CJ08B1.B,1,CV 0.25  
Misc Info :  
Comment :  
Method : \\\TARGET\_SERVER\GG\chem\gc11.i\GC11CJ08B1.B\DMFB040A.m  
Meth Date : 09-Oct-2009 10:22 jprescott Quant Type: ESTD  
Cal Date : 08-OCT-2009 13:48 Cal File: BCJ2072.d  
Als bottle: 1 Continuing Calibration Sample  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12  
Processing Host: V200T2

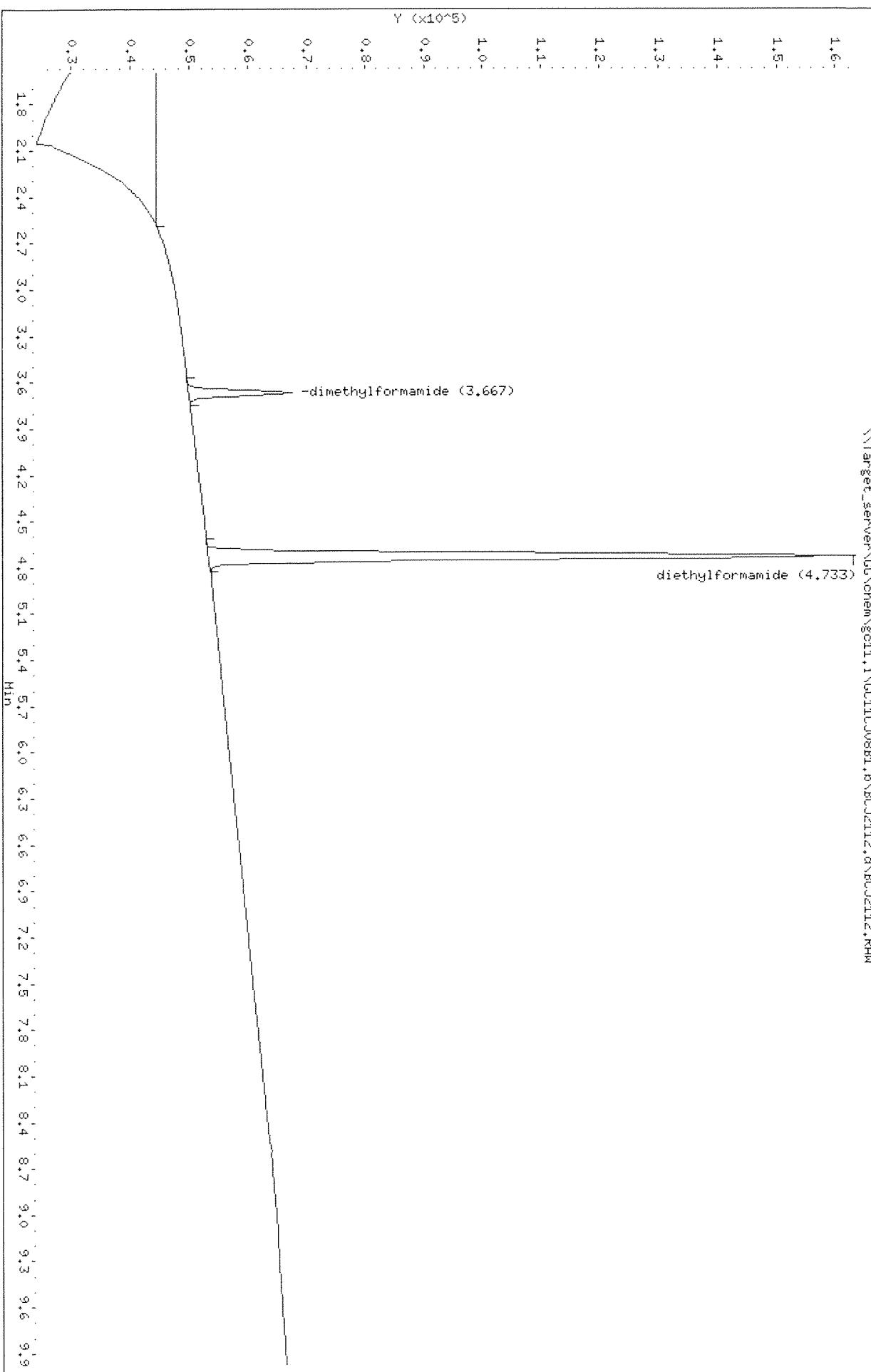
Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	FinalVolume (L)
Vo	0.00100	SampleVolume (L)
Cpnd Variable		Local Compound Variable

Compounds	AMOUNTS						REVIEW CODE
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT	ON-COL	
					( mg/L)	( mg/L)	
1 dimethylformamide	3.666	3.707	-0.041	43997	0.25000	0.193	
\$ 2 diethylformamide	4.733	4.760	-0.027	316014	2.50000	1.69	

Data File: \\Target\_server\\GC\\chem\\gc11.i\\GC11CJ08B1.b\\BCJ212.d  
Date : 09-OCT-2009 00:21  
Client ID:  
Sample Info: DMFB040A.M,GC11CJ08B1.B,1,CW 0.25  
Purge Volume: 0.0  
Column phase: ZB-WAX

Instrument: gc11.i  
Operator: KT  
Column diameter: 0.53  
\\Target\_server\\GC\\chem\\gc11.i\\GC11CJ08B1.b\\BCJ212.d\\BCJ212.RAW



## **Raw QC Data Section**

KATAHDIN ANALYTICAL SERVICES  
Report of Analytical Results

Client: Lab ID: WG68660-1  
Project: Wilmington Client ID: WG68660-Blank  
PO No: SDG: WIL-7  
Sample Date: Extracted by:  
Received Date: Extraction Method: 8033M  
Extraction Date: Analyst: JLP  
Analysis Date: 15-SEP-2009 12:42 Analysis Method: SW846 M8033  
Report Date: 10/09/2009 Lab Prep Batch: WG68660  
Matrix: WATER Units: mg/L  
% Solids: NA

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.020	1.0	0.020	0.020	0.0048
	diethylformamide			90%			

Page 01 of 01 BCI4086.d

Data File: \\Target\_server\GG\chem\gc11.i\GC11CI15A1.b\BCI4086.d  
Report Date: 09-Oct-2009 10:23

Katahdin Analytical Services

Data file : \\Target\_server\GG\chem\gc11.i\GC11CI15A1.b\BCI4086.d  
Lab Smp Id: WG68660-1 Client Smp ID: WG68660-Blank  
Inj Date : 15-SEP-2009 12:42  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB038A.M,GC11CI15A1.B,1,WG68660-1  
Misc Info : SW846 M8033  
Comment :  
Method : \\TARGET\_SERVER\GG\chem\gc11.i\GC11CI15A1.B\DMFB038A.m  
Meth Date : 09-Oct-2009 10:22 jprescott Quant Type: ESTD  
Cal Date : 15-SEP-2009 11:43 Cal File: BCI4082.d  
Als bottle: 1 QC Sample: BLANK  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12  
Processing Host: V200T2

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	FinalVolume (L)
Vo	0.00100	SampleVolume (L)
Cpnd Variable		Local Compound Variable

Compounds	CONCENTRATIONS							REVIEW CODE
	ON-COLUMN			FINAL				
	( mg/L)	( mg/L)						
\$ 2 diethylformamide	RT	EXP RT	DLT RT	RESPONSE				
	=====	=====	=====	=====	=====	=====	=====	=====
	2.693	2.680	0.013	24048	0.44815	0.448 (M)		M5

QC Flag Legend

M - Compound response manually integrated.

JLP  
100909

Data File: \\Target\_server\\GG\\chem\\gc11.i\\GC11C115A1.b\\BC14086.d  
Date : 15-SEP-2009 12:42

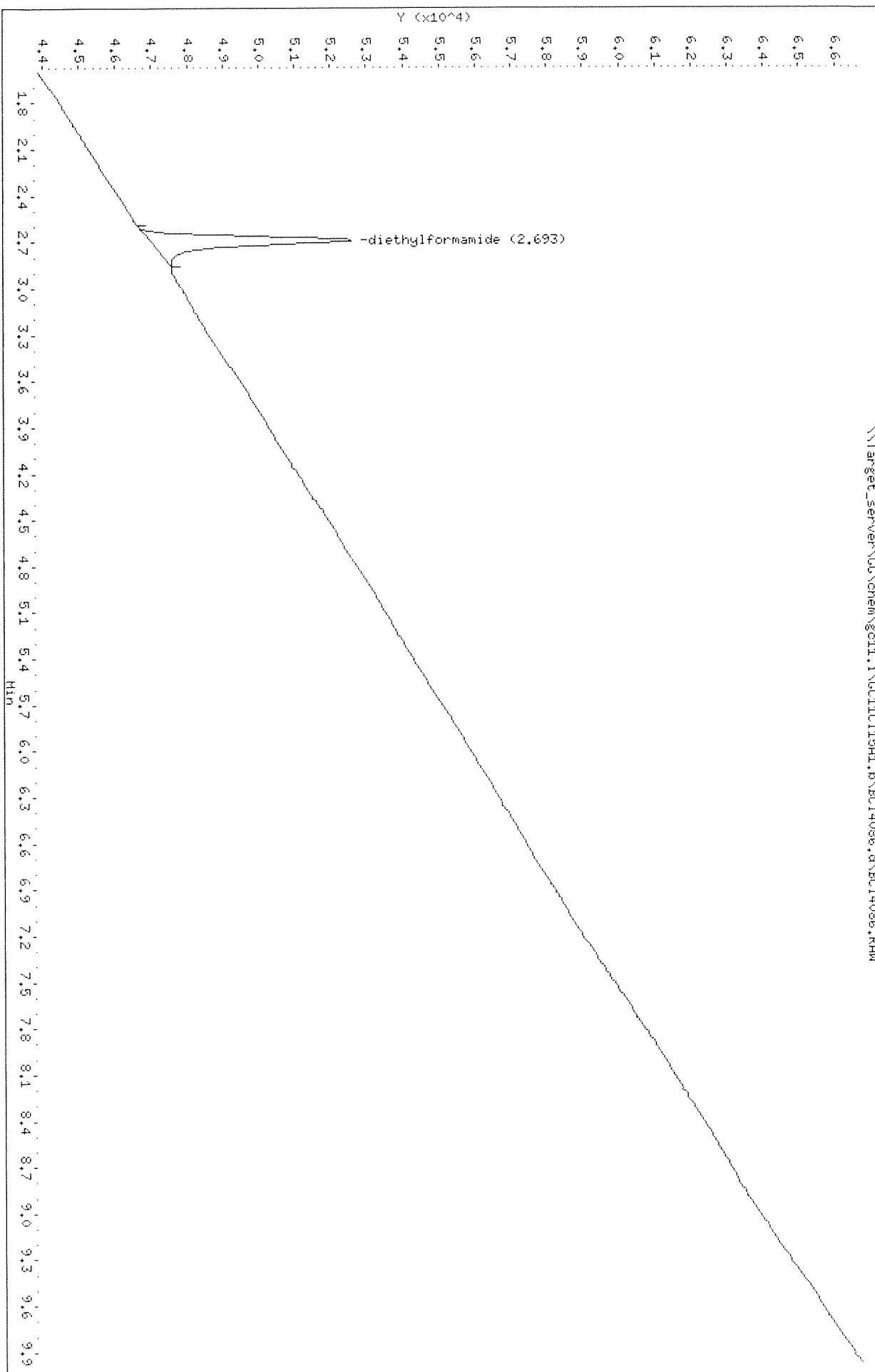
Client ID: WG686660-Blank  
Sample Info: DMEBO38a.M,GC11C115A1.B,1,WG686660-1  
Purge Volume: 0.0  
Column Phase: ZB-WAX

\\\\Target\_server\\GG\\chem\\gc11.i\\GC11C115A1.b\\BC14086.d\\BC14086.d

Instrument: gc11.i

Operator: JLP  
Column diameter: 0.53

\\\\Target\_server\\GG\\chem\\gc11.i\\GC11C115A1.b\\BC14086.d\\BC14086.RAW



KATAHDIN ANALYTICAL SERVICES  
Report of Analytical Results

Client: Lab ID: WG68988-1  
Project: Wilmington Client ID: WG68988-Blank  
PO No: SDG: WIL-7  
Sample Date: Extracted by:  
Received Date: Extraction Method: 8033M  
Extraction Date: Analyst: JLP  
Analysis Date: 23-SEP-2009 09:22 Analysis Method: SW846 M8033  
Report Date: 10/09/2009 Lab Prep Batch: WG68988  
Matrix: WATER Units: mg/L  
% Solids: NA

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.020	1.0	0.020	0.020	0.0048
	diethylformamide		111%				

Page 01 of 01 BCI6064.d

Data File: \\Target\_server\GG\chem\gc11.i\GC11CI23A1.b\BCI6064.d  
Report Date: 09-Oct-2009 10:23

Katahdin Analytical Services

Data file : \\Target\_server\GG\chem\gc11.i\GC11CI23A1.b\BCI6064.d  
Lab Smp Id: WG68988-1 Client Smp ID: WG68988-Blank  
Inj Date : 23-SEP-2009 09:22  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB038A.M,GC11CI23A1.B,1,WG68988-1  
Misc Info : SW846 M8033  
Comment :  
Method : \\\TARGET\_SERVER\GG\chem\gc11.i\GC11CI23A1.B\DMFB038A.m  
Meth Date : 09-Oct-2009 10:22 jprescott Quant Type: ESTD  
Cal Date : 15-SEP-2009 11:43 Cal File: BCI4082.d  
Als bottle: 1 QC Sample: BLANK  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12  
Processing Host: V200T2

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	FinalVolume (L)
Vo	0.00100	SampleVolume (L)
Cpnd Variable		Local Compound Variable

Compounds	CONCENTRATIONS						REVIEW CODE	
	ON - COLUMN			FINAL				
	( mg/L)	( mg/L)	( mg/L)	( mg/L)	( mg/L)	( mg/L)		
\$ 2 diethylformamide	2.680	2.680	0.000	31354	0.55395	0.554 (M)	M4	

QC Flag Legend

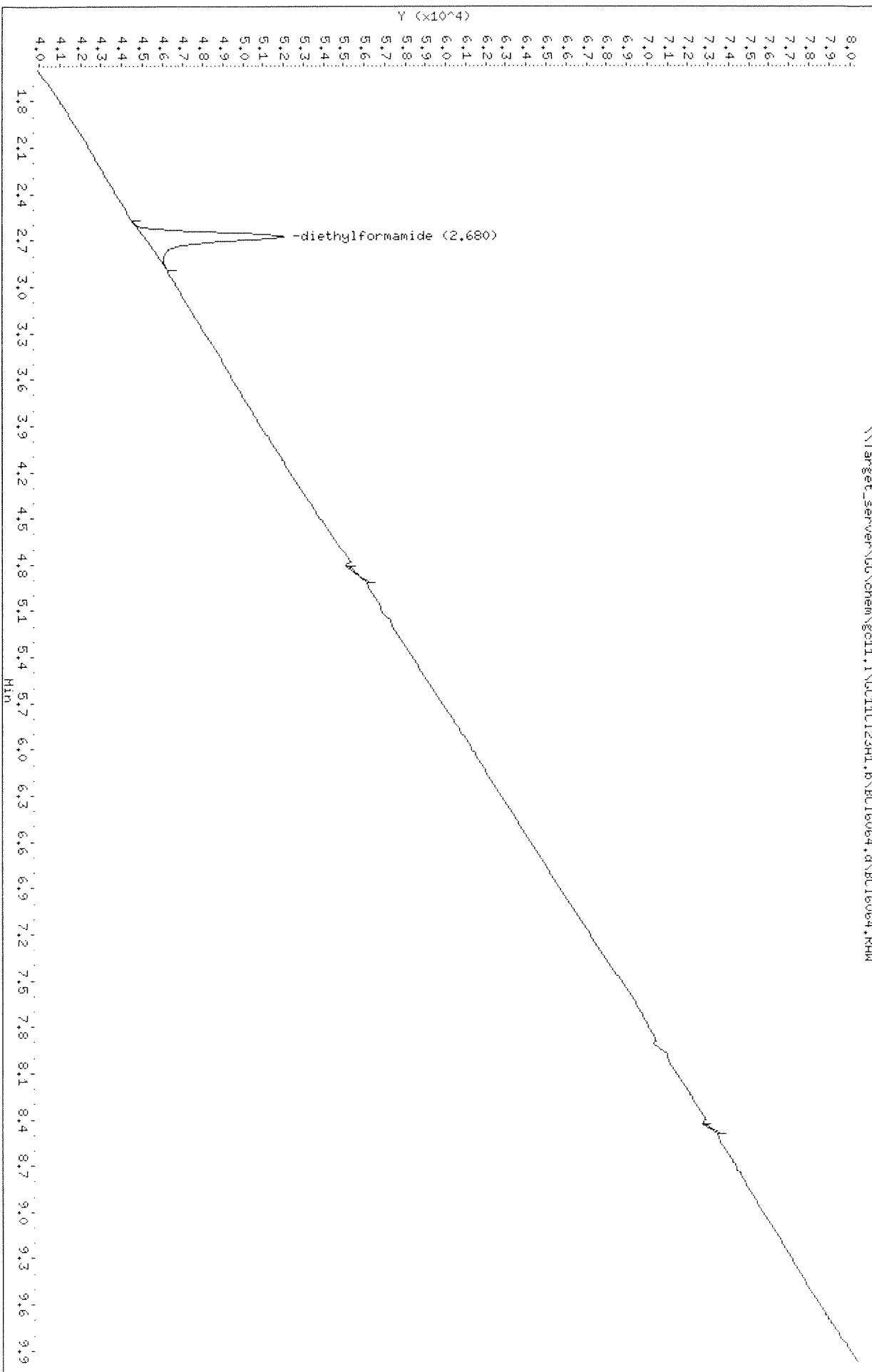
M - Compound response manually integrated.

Data File: \\Target\_server\GC\chem\gc11.i\GC11C123A1.b\BC16064.d  
Date : 23-SEP-2009 09:22  
Client ID: WG68988-Blank

Sample Info: DHFB038A.M,GC11C123A1.B,1,WG68988-1  
Purge Volume: 0.0  
Column Phase: ZB-WAX

\\Target\_server\GC\chem\gc11.i\GC11C123A1.b\BC16064.RAW

Instrument: gc11.i  
Operator: JLP  
Column diameter: 0.53



KATAHDIN ANALYTICAL SERVICES  
Report of Analytical Results

Client: Lab ID: WG68776-1  
Project: Wilmington Client ID: WG68776-Blank  
PO No: SDG: WIL-7  
Sample Date: Extracted by: JLP  
Received Date: Extraction Method: 8033M  
Extraction Date: 09/17/09 Analyst: KT  
Analysis Date: 08-OCT-2009 15:27 Analysis Method: SW846 8033M  
Report Date: 10/09/2009 Lab Prep Batch: WG68776  
Matrix: SOIL Units: mg/Kgdrwt  
% Solids: 100

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.80	1.0	0.80	0.80	0.80
	diethylformamide		75%				

Page 01 of 01 BCJ2075.d

Data File: \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2075.d  
Report Date: 09-Oct-2009 10:23

Katahdin Analytical Services

Data file : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2075.d  
Lab Smp Id: WG68776-1 Client Smp ID: WG68776-Blank  
Inj Date : 08-OCT-2009 15:27  
Operator : KT Inst ID: gc11.i  
Smp Info : DMFB040A.M,GC11CJ08B1.B,1,WG68776-1  
Misc Info : SW846 8033M  
Comment :  
Method : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\dmfB040A.m  
Meth Date : 09-Oct-2009 10:22 jprescott Quant Type: ESTD  
Cal Date : 08-OCT-2009 13:48 Cal File: BCJ2072.d  
Als bottle: 1 QC Sample: BLANK  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12

Concentration Formula: Amt \* DF \* (Vt/Vo)\*(100/(100-M)) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.04000	Volume of final extract (L)
Vo	0.00100	Sample Weight
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

Compounds	CONCENTRATIONS						REVIEW CODE	
	ON-COLUMN			FINAL				
	( mg/L)	(mg/Kgdrwt)	=====	=====	=====	=====		
\$ 2 diethylformamide	4.733	4.760	-0.027	66612	0.37498	15.0 (M)	MS	

QC Flag Legend

M - Compound response manually integrated.

JW  
100%  
100%

Data File: \\Target\_server\\GC\\chem\\gc11.i\\GC11CJ08B1.b\\BCJ2075.d  
Date : 08-OCT-2009 15:27  
Client ID: WG68776-Blank

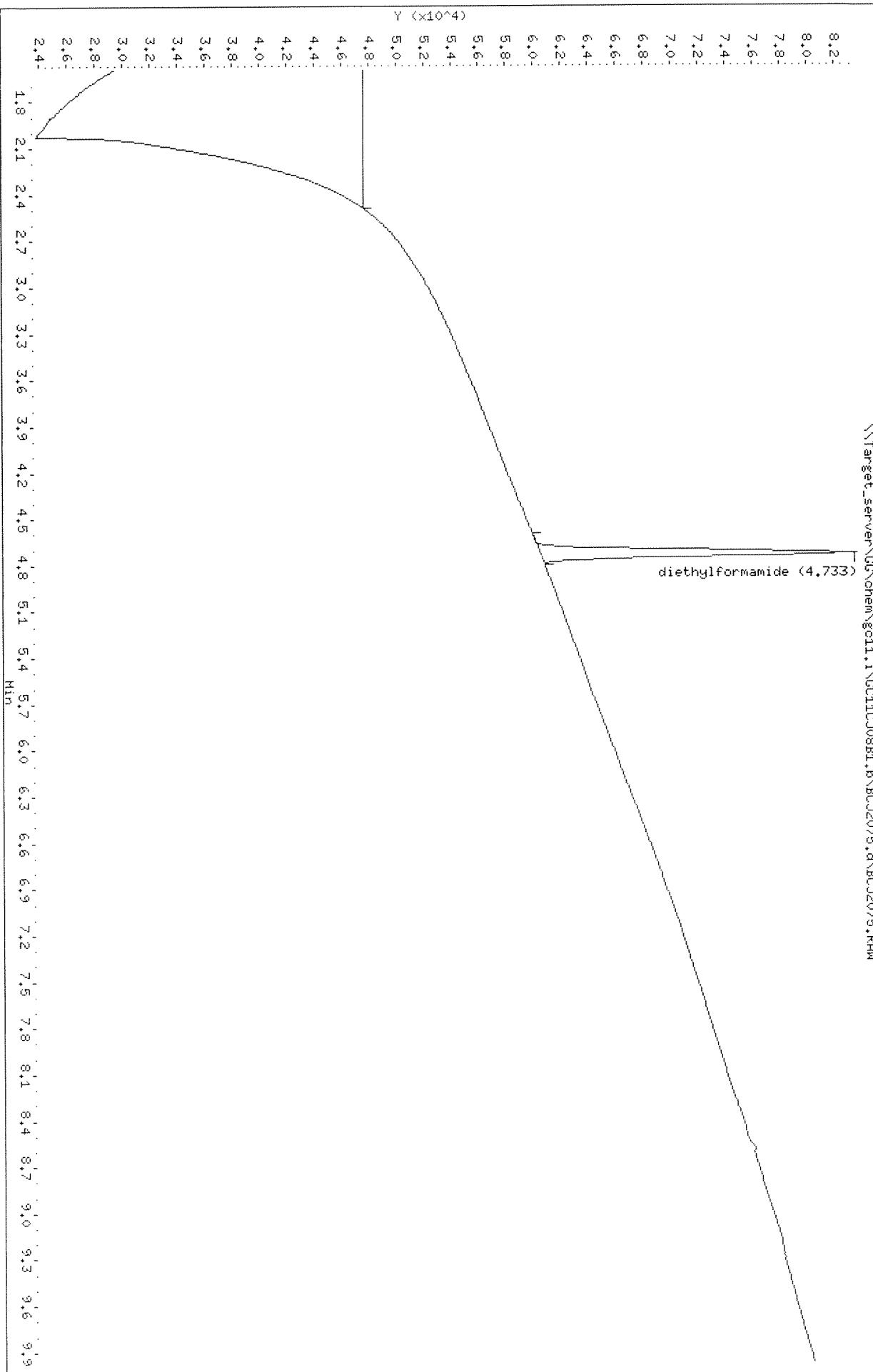
Sample Info: DMFB040A.M,GC11CJ08B1.B,1,WG68776-1  
Purge Volume: 0.0

Column phase: ZB-WAX

\\Target\_server\\GC\\chem\\gc11.i\\GC11CJ08B1.b\\BCJ2075.d\\BCJ2075.RAW

Instrument: gc11.i  
Operator: KT  
Column diameter: 0.53

diethylformamide (4.733)



KATAHDIN ANALYTICAL SERVICES  
Report of Analytical Results

Client: Lab ID: WG68986-1  
Project: Wilmington Client ID: WG68986-Blank  
PO No: SDG: WIL-7  
Sample Date: Extracted by: JLP  
Received Date: Extraction Method: 8033M  
Extraction Date: 09/23/09 Analyst: KT  
Analysis Date: 08-OCT-2009 21:26 Analysis Method: SW846 8033M  
Report Date: 10/09/2009 Lab Prep Batch: WG68986  
Matrix: SOIL Units: mg/Kgdrwt  
% Solids: 100

CAS#	Compound	Flags	Results	DF	PQL	Adj.PQL	Adj.MDL
	dimethylformamide	U	0.80	1.0	0.80	0.80	0.80
	diethylformamide		82%				

Page 01 of 01 BCJ2100.d

Data File: \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2100.d  
Report Date: 09-Oct-2009 10:23

Katahdin Analytical Services

Data file : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2100.d  
Lab Smp Id: WG68986-1 Client Smp ID: WG68986-Blank  
Inj Date : 08-OCT-2009 21:26  
Operator : KT Inst ID: gc11.i  
Smp Info : DMFB040A.M,GC11CJ08B1.B,1,WG68986-1  
Misc Info : SW846 8033M  
Comment :  
Method : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\dmfB040A.m  
Meth Date : 09-Oct-2009 10:22 jprescott Quant Type: ESTD  
Cal Date : 08-OCT-2009 13:48 Cal File: BCJ2072.d  
Als bottle: 1 QC Sample: BLANK  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12

Concentration Formula: Amt \* DF \* (Vt/Vo)\*(100/(100-M)) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.04000	Volume of final extract (L)
Vo	0.00100	Sample Weight
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

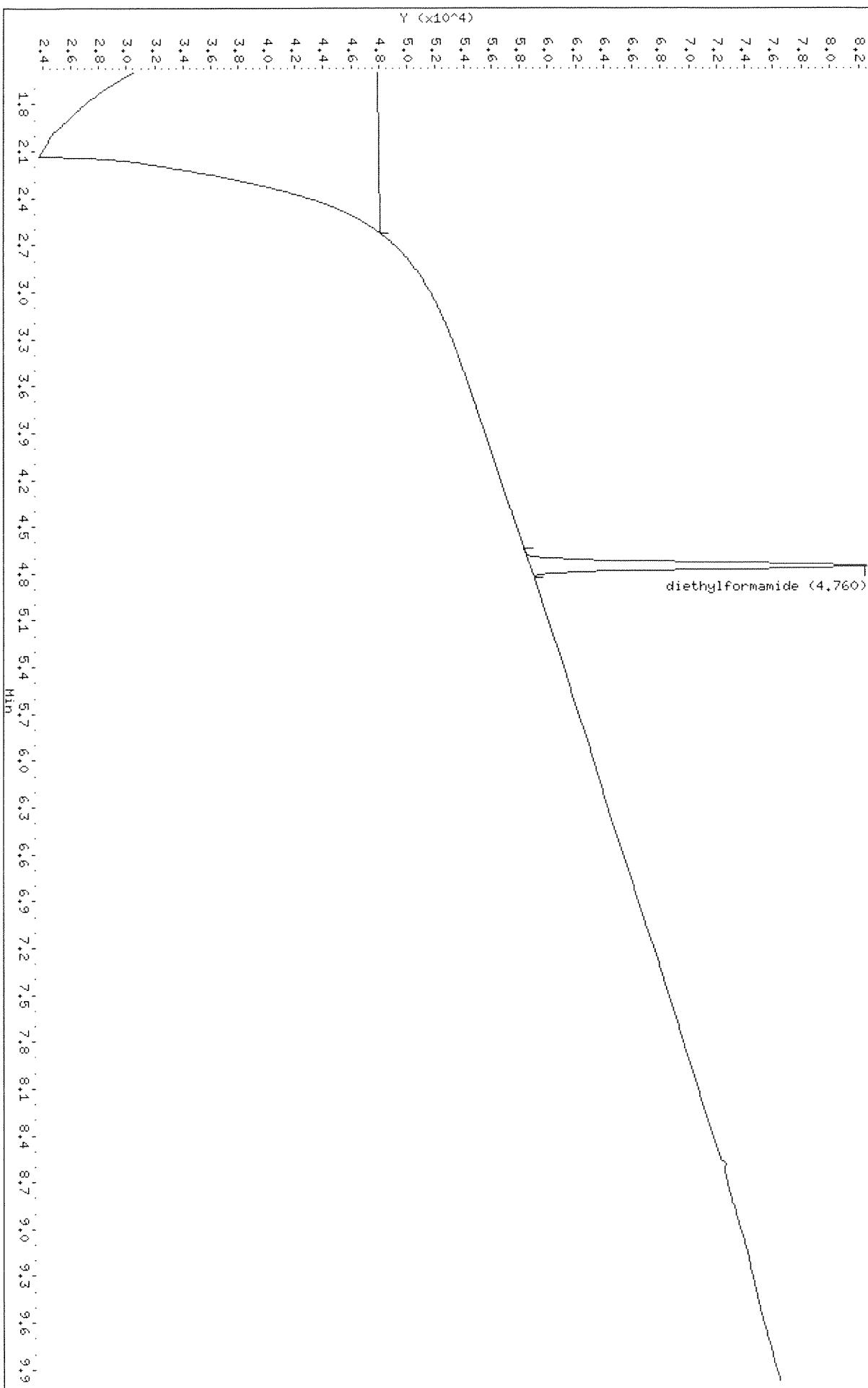
Compounds	CONCENTRATIONS						REVIEW CODE
	ON-COLUMN			FINAL			
	( mg/L)	(mg/Kgdrwt)	=====	=====	=====	=====	
\$ 2 diethylformamide	4.760	4.760	0.000	73451	0.41112	16.4	=====

Data File: \\Target\_server\SG\chem\gc11.i\GC11CJ08B1.b\BCJ2100.d  
Date : 08-OCT-2009 21:26  
Client ID: WC68986-Blank

Sample Info: DHPD040A.M,GC11CJ08B1.B,1,WC68986-1  
Purge Volume: 0.0  
Column Phase: ZB-WAX

Instrument: gc11.i  
Operator: KT  
Column diameter: 0.53

\\Target\_server\SG\chem\gc11.i\GC11CJ08B1.b\BCJ2100.d\BCJ2100.RAW



KATAHDIN ANALYTICAL SERVICES  
LAB CONTROL SAMPLE

Client: Lab ID: WG68660-2 & WG68660-3  
Project: Wilmington Client ID: WG68660-LCS & WG68660-LCSD  
PO No: SDG: WIL-7  
Sample Date: Extracted by:  
Received Date: Extraction Method: 8033M  
Extraction Date: Analyst: JLP  
Analysis Date: 09/15/09 Analysis Method: SW846 M8033  
Report Date: 10/09/2009 Lab Prep Batch: WG68660  
Matrix: WATER Units: mg/L

COMPOUND	LCS	LCSD	SAMPLE	LCS	LCSD	LCS	LCSD	%RPD	QC.
	SPIKE	SPIKE	CONC.	CONC.	CONC.	%REC.	%REC.	%RPD	LIMIT LIMITS
dimethylformamide	0.10	0.10	NA	0.08	0.08	78	85	9	30 70-130

Data File: \\Target\_server\GG\chem\gc11.i\GC11CI15A1.b\BCI4087.d  
Report Date: 09-Oct-2009 10:23

Katahdin Analytical Services

Data file : \\Target\_server\GG\chem\gc11.i\GC11CI15A1.b\BCI4087.d  
Lab Smp Id: WG68660-2 Client Smp ID: WG68660-LCS  
Inj Date : 15-SEP-2009 12:56  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB038A.M,GC11CI15A1.B,1,WG68660-2  
Misc Info : SW846 M8033  
Comment :  
Method : \\\TARGET\_SERVER\GG\chem\gc11.i\GC11CI15A1.B\DMFB038A.m  
Meth Date : 09-Oct-2009 10:22 jprescott Quant Type: ESTD  
Cal Date : 15-SEP-2009 11:43 Cal File: BCI4082.d  
Als bottle: 1 QC Sample: LCS  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12  
Processing Host: V200T2

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	FinalVolume (L)
Vo	0.00100	SampleVolume (L)
Cpnd Variable		Local Compound Variable

Compounds	CONCENTRATIONS						REVIEW CODE	
	ON-COLUMN			FINAL				
	RT	EXP RT	DLT RT	RESPONSE	( mg/L)	( mg/L)		
1 dimethylformamide	1.960	1.960	0.000	3152	0.07814	0.0781 (M)	MS	
2 diethylformamide	2.680	2.680	0.000	32476	0.57020	0.570 (M)		

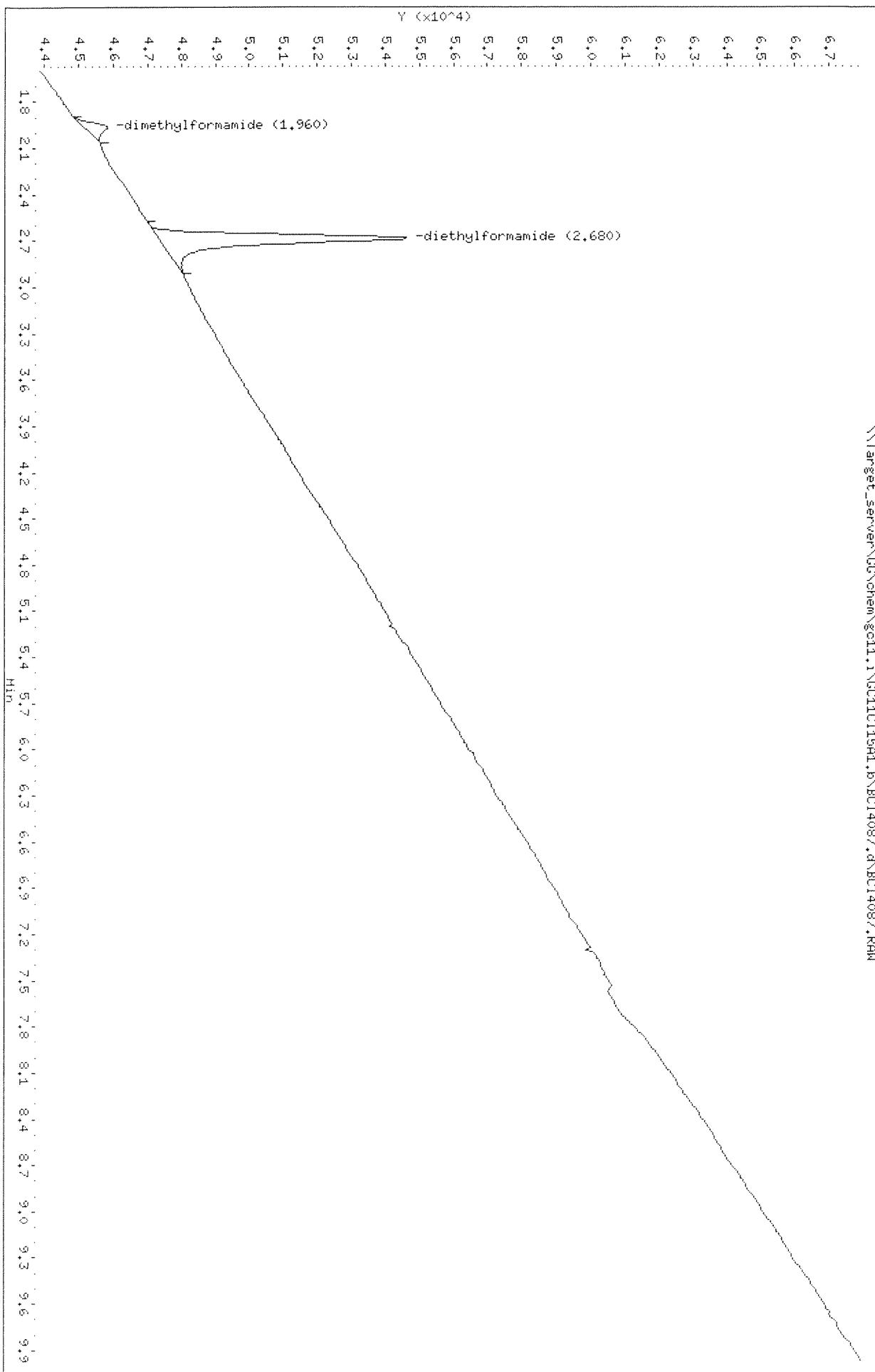
QC Flag Legend

M - Compound response manually integrated.

Data File: \\Target\_server\GG\chem\gc11.i\GC11C115A1.b\BC14087.d  
Date : 15-SEP-2009 12:56  
Client ID: W068660-LCS  
Sample Info: DMFB038A.H,GC11C115A1.B,1,W068660-2  
Purge Volume: 0.0  
Column Phase: ZB-WAX

\\Target\_server\GG\chem\gc11.i\GC11C115A1.b\BC14087.d\BC14087.RAW

Instrument: gc11.i  
Operator: JLP  
Column diameter: 0.53



Data File: \\Target\_server\GG\chem\gc11.i\GC11CI15A1.b\BCI4089.d  
Report Date: 09-Oct-2009 10:23

Katahdin Analytical Services

Data file : \\Target\_server\GG\chem\gc11.i\GC11CI15A1.b\BCI4089.d  
Lab Smp Id: WG68660-3 Client Smp ID: WG68660-LCSD  
Inj Date : 15-SEP-2009 13:24  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB038A.M,GC11CI15A1.B,1,WG68660-3  
Misc Info : SW846 M8033  
Comment :  
Method : \\TARGET\_SERVER\GG\chem\gc11.i\GC11CI15A1.B\DMFB038A.m  
Meth Date : 09-Oct-2009 10:22 jprescott Quant Type: ESTD  
Cal Date : 15-SEP-2009 11:43 Cal File: BCI4082.d  
Als bottle: 1 QC Sample: LCSD  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12  
Processing Host: V200T2

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	FinalVolume (L)
Vo	0.00100	SampleVolume (L)
Cpnd Variable		Local Compound Variable

Compounds	CONCENTRATIONS						REVIEW CODE	
	ON - COLUMN		FINAL		( mg/L)	( mg/L)		
	RT	EXP RT	DLT RT	RESPONSE				
1 dimethylformamide	1.960	1.960	0.000	3942	0.08520	0.0852 (M)	M5	
\$ 2 diethylformamide	2.680	2.680	0.000	33320	0.58242	0.582 (M)		

QC Flag Legend

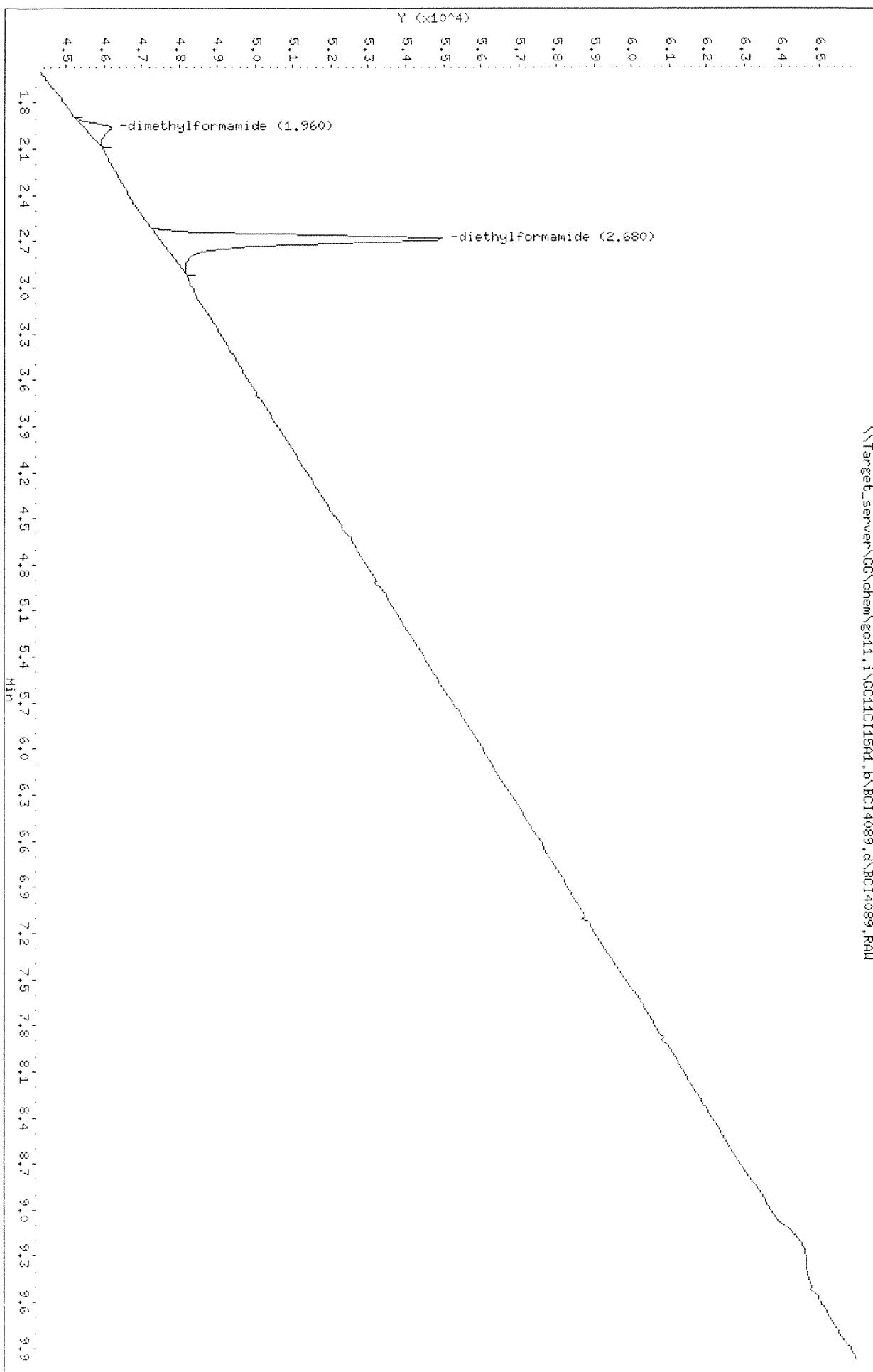
M - Compound response manually integrated.

Data File: \\Target\_server\\GC\\chem\\gc11.i\\GC11C115A1.b\\BC14089.d  
Date : 15-SEP-2009 13:24  
Client ID: WG68660-LCSD

Sample Info: DMFB038A.H,GC11C115A1.B,1,WG68660-3  
Purge Volume: 0.0  
Column phase: ZB-WAX

Instrument: gc11.i  
Operator: JLP  
Column diameter: 0.53

\\Target\_server\\GC\\chem\\gc11.i\\GC11C115A1.b\\BC14089.d\\BC14089.RAW



KATAHDIN ANALYTICAL SERVICES  
LAB CONTROL SAMPLE

Client: Lab ID: WG68988-2 & WG68988-3  
Project: Wilmington Client ID: WG68988-LCS & WG68988-LCSD  
PO No: SDG: WIL-7  
Sample Date: Extracted by:  
Received Date: Extraction Method: 8033M  
Extraction Date: Analyst: JLP  
Analysis Date: 09/23/09 Analysis Method: SW846 M8033  
Report Date: 10/09/2009 Lab Prep Batch: WG68988  
Matrix: WATER Units: mg/L

COMPOUND	LCS SPIKE	LCSD SPIKE	SAMPLE CONC.	LCS CONC.	LCSD CONC.	LCS %REC.	LCSD %REC.	%RPD %RPD	LIMIT	QC. LIMITS
dimethylformamide	0.10	0.10	NA	0.08	0.08	80	82	2	30	70-130

Data File: \\Target\_server\GG\chem\gc11.i\GC11CI23A1.b\BCI6065.d  
Report Date: 09-Oct-2009 10:23

Katahdin Analytical Services

Data file : \\Target\_server\GG\chem\gc11.i\GC11CI23A1.b\BCI6065.d  
Lab Smp Id: WG68988-2 Client Smp ID: WG68988-LCS  
Inj Date : 23-SEP-2009 09:36  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB038A.M, GC11CI23A1.B, 1, WG68988-2  
Misc Info : SW846 M8033  
Comment :  
Method : \\\TARGET\_SERVER\GG\chem\gc11.i\GC11CI23A1.B\DMFB038A.m  
Meth Date : 09-Oct-2009 10:22 jprescott Quant Type: ESTD  
Cal Date : 15-SEP-2009 11:43 Cal File: BCI4082.d  
Als bottle: 1 QC Sample: LCS  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12  
Processing Host: V200T2

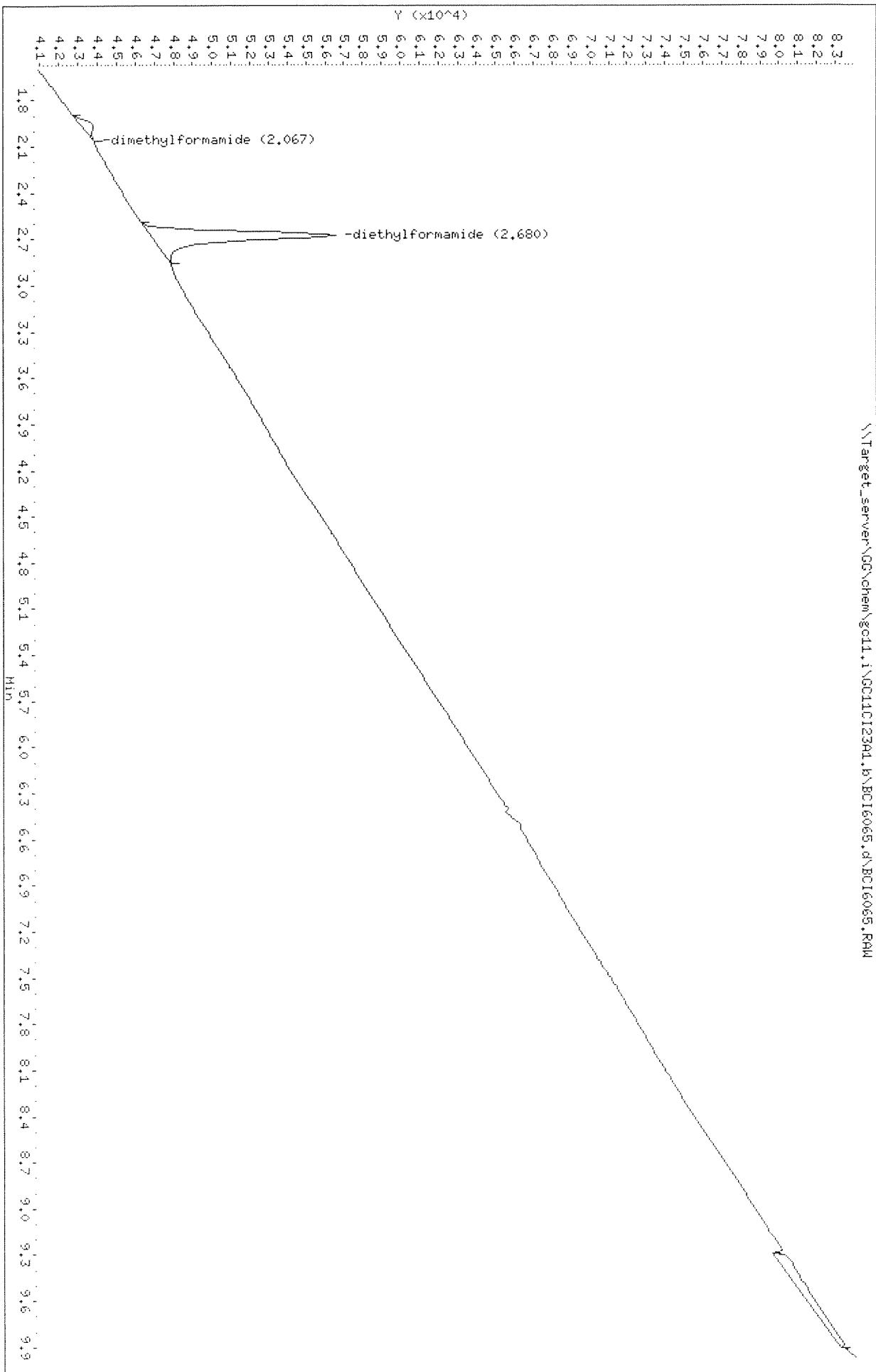
Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	FinalVolume (L)
Vo	0.00100	SampleVolume (L)
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	CONCENTRATIONS			REVIEW CODE
				ON-COLUMN		FINAL	
				( mg/L)	( mg/L)	( mg/L)	
1 dimethylformamide	2.066	1.960	0.106	3272	0.08031	0.0803 (M)	M5
\$ 2 diethylformamide	2.680	2.680	0.000	41858	0.70607	0.706 (M)	

QC Flag Legend

M - Compound response manually integrated.



Data File: \\Target\_server\GG\chem\gc11.i\GC11CI23A1.b\BCI6067.d  
Report Date: 09-Oct-2009 10:23

Katahdin Analytical Services

Data file : \\Target\_server\GG\chem\gc11.i\GC11CI23A1.b\BCI6067.d  
Lab Smp Id: WG68988-3 Client Smp ID: WG68988-LCSD  
Inj Date : 23-SEP-2009 10:04  
Operator : JLP Inst ID: gc11.i  
Smp Info : DMFB038A.M, GC11CI23A1.B, 1, WG68988-3  
Misc Info : SW846 M8033  
Comment :  
Method : \\\TARGET\_SERVER\GG\chem\gc11.i\GC11CI23A1.B\DMFB038A.m  
Meth Date : 09-Oct-2009 10:22 jprescott Quant Type: ESTD  
Cal Date : 15-SEP-2009 11:43 Cal File: BCI4082.d  
Als bottle: 1 QC Sample: LCSD  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12  
Processing Host: V200T2

Concentration Formula: Amt \* DF \* (Vt/Vo) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.00100	FinalVolume (L)
Vo	0.00100	SampleVolume (L)
Cpnd Variable		Local Compound Variable

Compounds	CONCENTRATIONS						REVIEW CODE	
	ON-COLUMN		FINAL		( mg/L)	( mg/L)		
	RT	EXP RT	DLT RT	RESPONSE				
1 dimethylformamide	1.973	1.960	0.013	3351	0.08174	0.0817(M)	MS	
\$ 2 diethylformamide	2.680	2.680	0.000	39597	0.67333	0.673(M)	<i>JW 10/09/09</i>	

QC Flag Legend

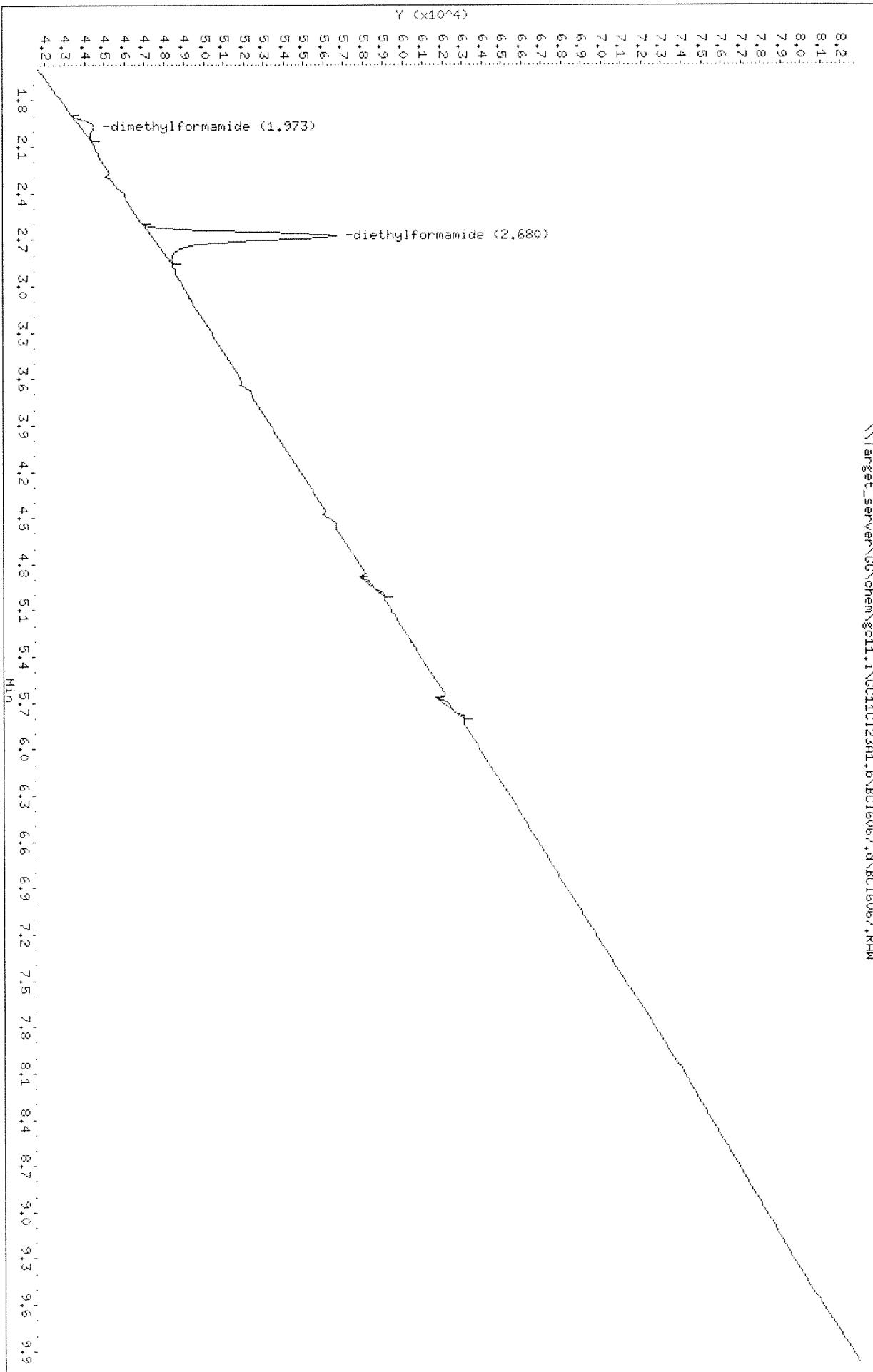
M - Compound response manually integrated.

Data File: \\Target\_server\\GC\\chem\\gc11.i\\GC11C123A1.b\\BC16067.d  
Date : 23-SEP-2009 10:04  
Client ID: WG68988-LCSD

Sample Info: DMFB038A.H,GC11C123A1.B,1,WG68988-3  
Purge Volume: 0.0  
Column Phase: ZB-WAX

\\Target\_server\\GC\\chem\\gc11.i\\GC11C123A1.b\\BC16067.d\\BC16067.RAW

Instrument: gc11.i  
Operator: JLF  
Column diameter: 0.53



KATAHDIN ANALYTICAL SERVICES  
LAB CONTROL SAMPLE

Client: Lab ID: WG68776-2 & WG68776-3  
Project: Wilmington Client ID: WG68776-LCS & WG68776-LCSD  
PO No: SDG: WIL-7  
Sample Date: Extracted by: JLP  
Received Date: Extraction Method: 8033M  
Extraction Date: 09/17/09 Analyst: KT  
Analysis Date: 10/08/09 Analysis Method: SW846 8033M  
Report Date: 10/09/2009 Lab Prep Batch: WG68776  
Matrix: SOIL Units: mg/Kgdrwt

COMPOUND	LCS SPIKE	LCSD SPIKE	SAMPLE CONC.	LCS CONC.	LCSD CONC.	LCS %REC.	LCSD %REC.	%RPD %RPD	QC. LIMIT	QC. LIMITS	
dimethylformamide	10	10	NA	6.6	10	*	66	103	44	50	70-130

Data File: \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2076.d  
Report Date: 09-Oct-2009 10:23

Katahdin Analytical Services

Data file : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2076.d  
Lab Smp Id: WG68776-2 Client Smp ID: WG68776-LCS  
Inj Date : 08-OCT-2009 15:42  
Operator : KT Inst ID: gc11.i  
Smp Info : DMFB040A.M,GC11CJ08B1.B,1,WG68776-2  
Misc Info : SW846 8033M  
Comment :  
Method : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\dmfB040A.m  
Meth Date : 09-Oct-2009 10:22 jprescott Quant Type: ESTD  
Cal Date : 08-OCT-2009 13:48 Cal File: BCJ2072.d  
Als bottle: 1 QC Sample: LCS  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12

Concentration Formula: Amt \* DF \* (Vt/Vo)\*(100/(100-M)) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.04000	Volume of final extract (L)
Vo	0.00100	Sample Weight
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

Compounds	CONCENTRATIONS						REVIEW CODE	
	ON-COLUMN			FINAL				
	RT	EXP RT	DLT RT	RESPONSE	( mg/L)	(mg/Kgdrwt)		
1 dimethylformamide	3.666	3.707	-0.041	37786	0.16435	6.57(R)		
\$ 2 diethylformamide	4.733	4.760	-0.027	32540	0.19492	7.80		

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

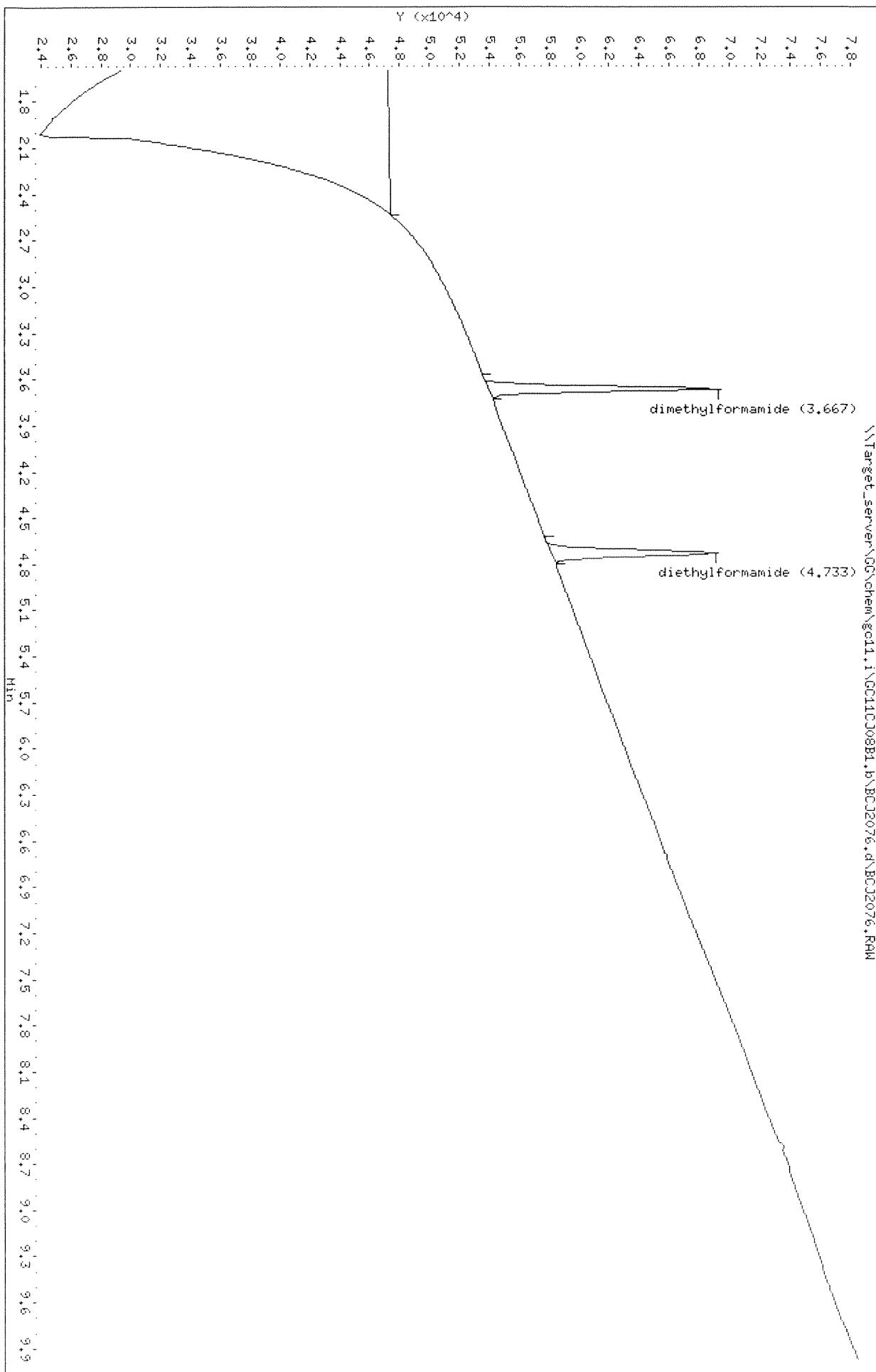
Data File: \\Target\_server\\GC\\chem\\gc11.i\\GC11CJ08B1.b\\BCJ2076.d  
Date : 08-OCT-2009 15:42

Client ID: WG68776-LCS  
Purge Volume: 0.0

Column phase: ZB-WAX

\\Target\_server\\GC\\chem\\gc11.i\\GC11CJ08B1.b\\BCJ2076.d\\BCJ2076.RAW

Instrument: gc11.i  
Operator: KT  
Column diameter: 0.53



Data File: \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2078.d  
Report Date: 09-Oct-2009 10:23

Katahdin Analytical Services

Data file : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2078.d  
Lab Smp Id: WG68776-3 Client Smp ID: WG68776-LCSD  
Inj Date : 08-OCT-2009 16:10  
Operator : KT Inst ID: gc11.i  
Smp Info : DMFB040A.M, GC11CJ08B1.B, 1, WG68776-3  
Misc Info : SW846 8033M  
Comment :  
Method : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\dmfB040A.m  
Meth Date : 09-Oct-2009 10:22 jprescott Quant Type: ESTD  
Cal Date : 08-OCT-2009 13:48 Cal File: BCJ2072.d  
Als bottle: 1 QC Sample: LCSD  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12

Concentration Formula: Amt \* DF \* (Vt/Vo)\*(100/(100-M)) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.04000	Volume of final extract (L)
Vo	0.00100	Sample Weight
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

Compounds	CONCENTRATIONS							REVIEW CODE
	ON-COLUMN			FINAL				
	( mg/L)	(mg/Kgdrwt)						
=====	=====	=====	=====	=====	=====	=====	=====	
1 dimethylformamide	3.666	3.707	-0.041	58227	0.25849	10.3 (M)	M5	
2 diethylformamide	4.733	4.760	-0.027	48490	0.27921	11.2		

QC Flag Legend

M - Compound response manually integrated.

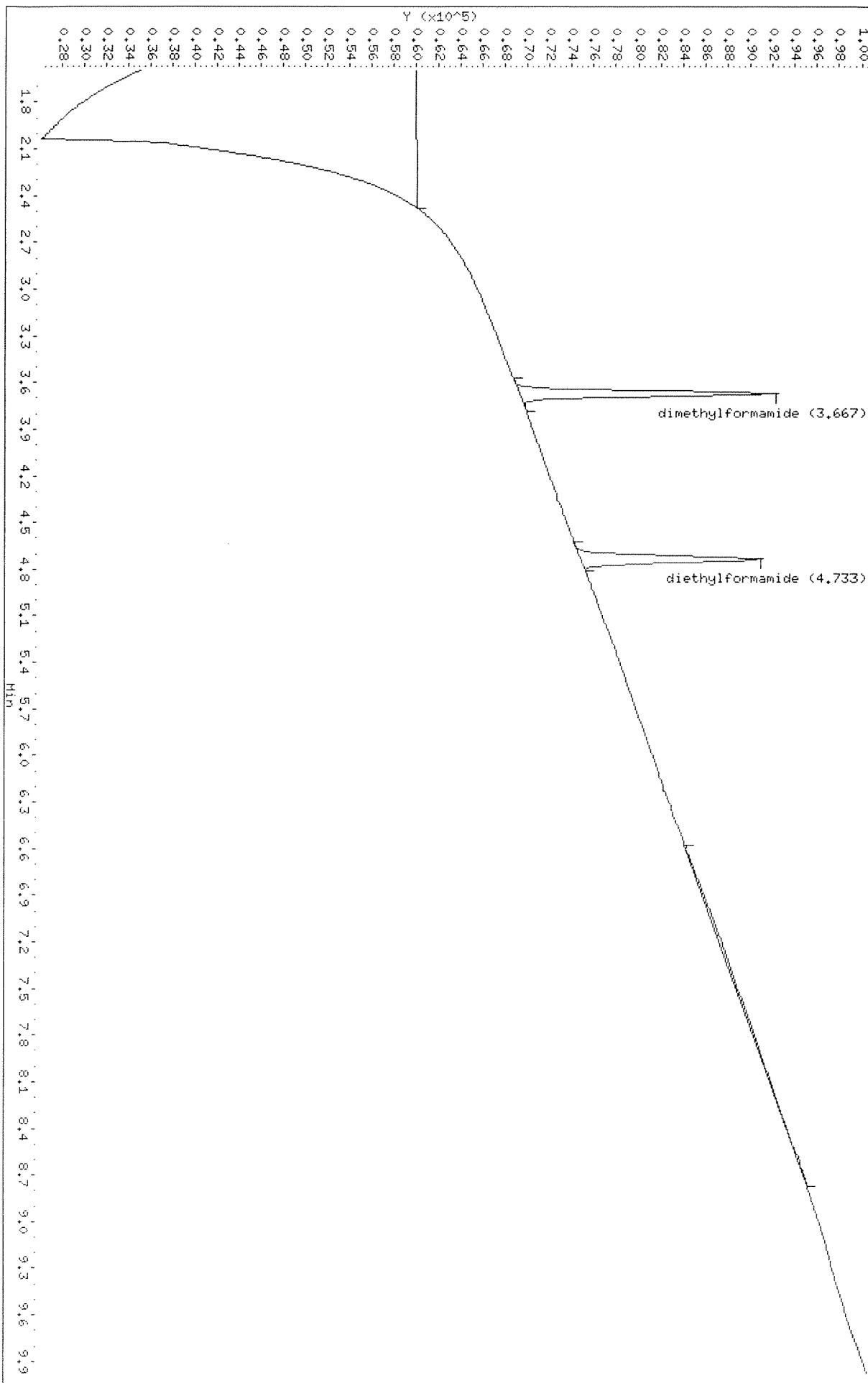
JP  
100909

Data File: \\Target\_server\GC\chem\gc11.i\GC11CJ08B1.b\BCJ2078.d  
Date : 08-OCT-2009 16:10  
Client ID: W068776-LCSD

Sample Info: DMEB040A.M,GC11CJ08B1.B,1,W068776-3  
Purge Volume: 0.0  
Column Phase: ZB-WAX

Instrument: sc11.i  
Operator: KT  
Column diameter: 0.53

\\Target\_server\GC\chem\gc11.i\GC11CJ08B1.b\BCJ2078.d\BCJ2073.RAW



KATAHDIN ANALYTICAL SERVICES  
LAB CONTROL SAMPLE

Client: Lab ID: WG68986-2 & WG68986-3  
Project: Wilmington Client ID: WG68986-LCS & WG68986-LCSD  
PO No: SDG: WIL-7  
Sample Date: Extracted by: JLP  
Received Date: Extraction Method: 8033M  
Extraction Date: 09/23/09 Analyst: KT  
Analysis Date: 10/08/09 Analysis Method: SW846 8033M  
Report Date: 10/09/2009 Lab Prep Batch: WG68986  
Matrix: SOIL Units: mg/Kgdrwt

COMPOUND	LCS SPIKE	LCSD SPIKE	SAMPLE CONC.	LCS CONC.	LCSD CONC.	LCS %REC.	LCSD %REC.	%RPD %RPD	QC. LIMIT	QC. LIMITS	
dimethylformamide	10	10	NA	6.7	7.2	*	67	72	7	50	70-130

Data File: \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2103.d  
Report Date: 09-Oct-2009 10:23

Katahdin Analytical Services

Data file : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2103.d  
Lab Smp Id: WG68986-2 Client Smp ID: WG68986-LCS  
Inj Date : 08-OCT-2009 22:10  
Operator : KT Inst ID: gc11.i  
Smp Info : DMFB040A.M, GC11CJ08B1.B, 1, WG68986-2  
Misc Info : SW846 8033M  
Comment :  
Method : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\dmfB040A.m  
Meth Date : 09-Oct-2009 10:22 jprescott Quant Type: ESTD  
Cal Date : 08-OCT-2009 13:48 Cal File: BCJ2072.d  
Als bottle: 1 QC Sample: LCS  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12

Concentration Formula: Amt \* DF \* (Vt/Vo)\*(100/(100-M)) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.04000	Volume of final extract (L)
Vo	0.00100	Sample Weight
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

Compounds	CONCENTRATIONS						REVIEW CODE	
	ON-COLUMN			FINAL				
	( mg/L)	(mg/Kgdrwt)	=====	=====	=====	=====		
1 dimethylformamide	3.693	3.707	-0.014	38564	0.16793	6.72 (R)	=====	
2 diethylformamide	4.746	4.760	-0.014	34333	0.20439	8.18	=====	

QC Flag Legend

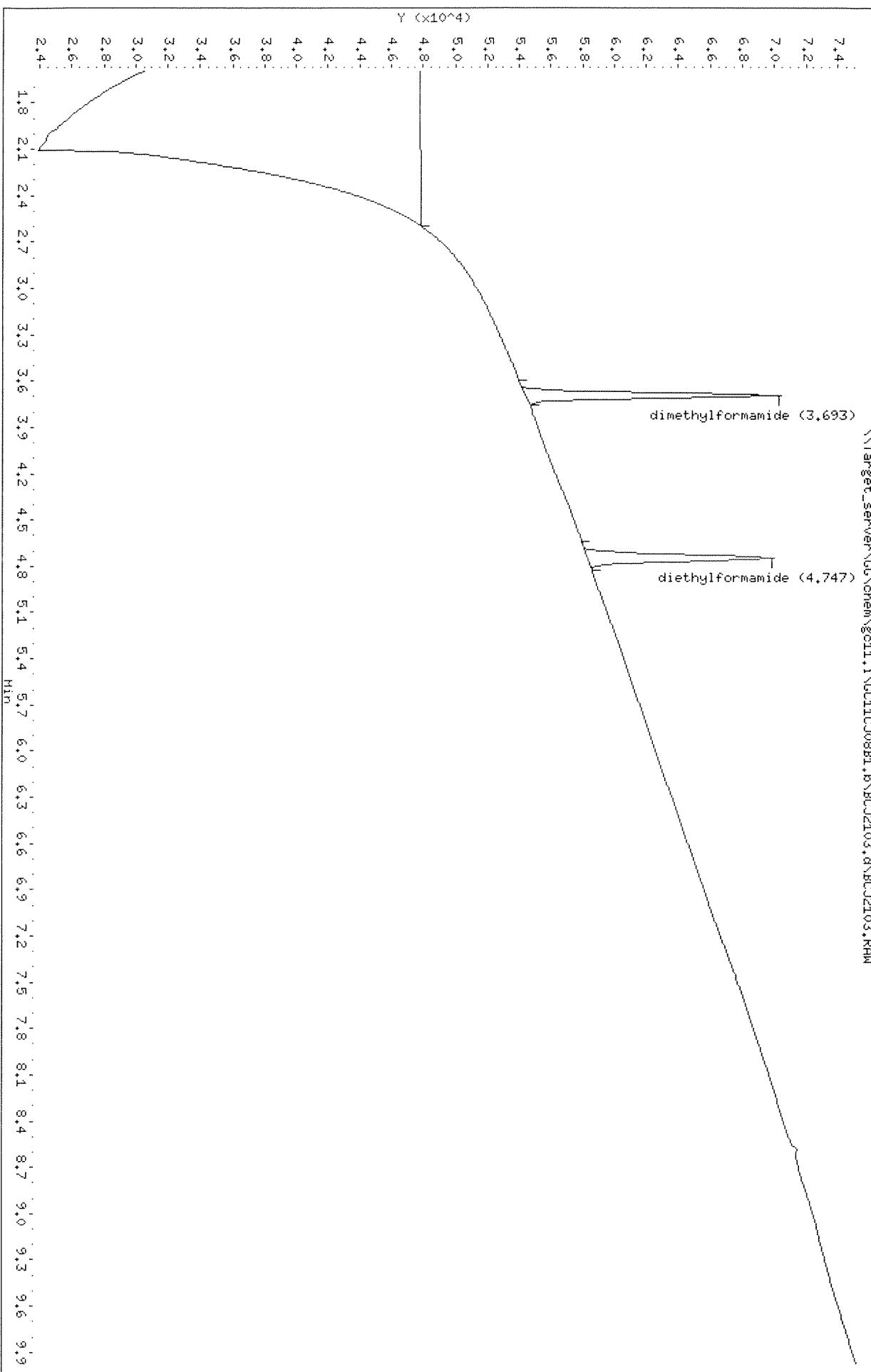
R - Spike/Surrogate failed recovery limits.

Data File: \\Target\_server\\GC\\chem\\gc11.i\\GC1CJ08B1.b\\BCJ2103.d  
Date : 08-OCT-2009 22:10  
Client ID: WG68986-LCS  
Purge Volume: 0.0

Sample Info.: DMFB040A.M,GC1CJ08B1.B,1,WG68986-2  
Column Phase: ZB-WAX

Instrument: gc11.i  
Operator: KT  
Column diameter: 0.53

\\Target\_server\\GC\\chem\\gc11.i\\GC1CJ08B1.b\\BCJ2103.d\\BCJ2103.RAW



Data File: \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2105.d  
Report Date: 09-Oct-2009 10:23

Katahdin Analytical Services

Data file : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2105.d  
Lab Smp Id: WG68986-3 Client Smp ID: WG68986-LCSD  
Inj Date : 08-OCT-2009 22:39  
Operator : KT Inst ID: gc11.i  
Smp Info : DMFB040A.M, GC11CJ08B1.B,1, WG68986-3  
Misc Info : SW846 8033M  
Comment :  
Method : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\dmfB040A.m  
Meth Date : 09-Oct-2009 10:22 jprescott Quant Type: ESTD  
Cal Date : 08-OCT-2009 13:48 Cal File: BCJ2072.d  
Als bottle: 1 QC Sample: LCSD  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12

Concentration Formula: Amt \* DF \* (Vt/Vo)\*(100/(100-M)) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.04000	Volume of final extract (L)
Vo	0.00100	Sample Weight
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

Compounds	CONCENTRATIONS							REVIEW CODE
	ON-COLUMN			FINAL				
	( mg/L)	(mg/Kgdrwt)						
=====	=====	=====	=====	=====	=====	=====		
1 dimethylformamide	3.706	3.707	-0.001	41289	0.18048	7.22 (M)	M5	
\$ 2 diethylformamide	4.746	4.760	-0.014	36999	0.21848	8.74		

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Target\_server\\GC\\chem\\gc11.i\\GC11CJ08B1.b\\BCJ2105.d  
Date : 08-OCT-2009 22:39  
Client ID: WG68986-LCSD

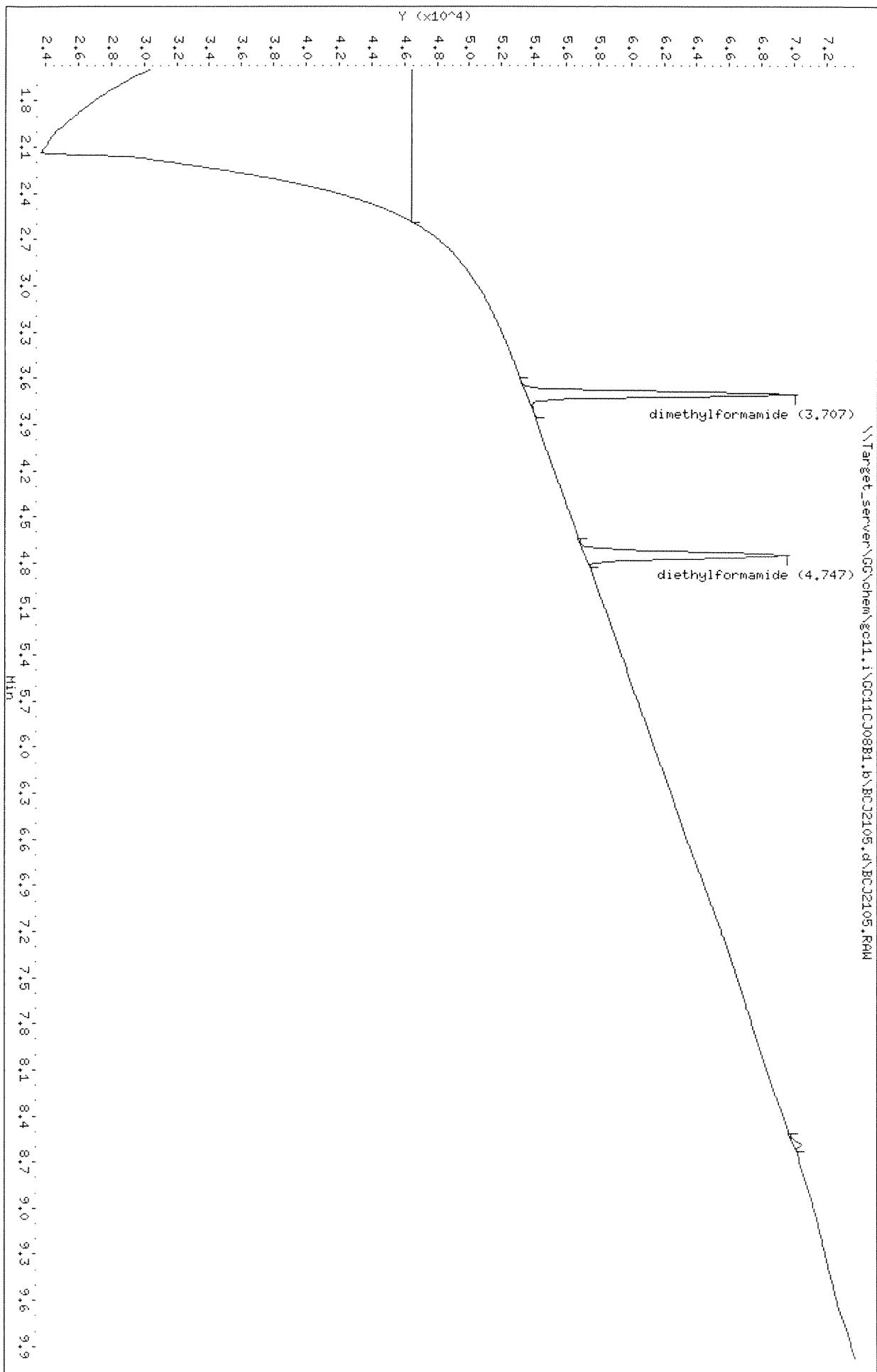
Sample Info: DMFB040A.H,GC11CJ08B1.B,1,WG68986-3  
Purge Volume: 0.0  
Column Phase: ZB-WAX

Instrument: gc11.i  
Operator: KT  
Column diameter: 0.53

\\Target\_server\\GC\\chem\\gc11.i\\GC11CJ08B1.b\\BCJ2105.d\\BCJ2105.RAW

dimethylformamide (3.707)

diethylformamide (4.747)



**KATAHDIN ANALYTICAL SERVICES**  
**MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY**

Client: Olin Corporation  
Project: Wilmington  
PO No:  
Sample Date: 09/11/09  
Received Date: 09/12/09  
Extraction Date: 09/17/09  
Analysis Date: 10/08/09  
Report Date: 10/09/2009  
Matrix: SOIL

Lab ID: WG68776-4 & WG68776-5  
Client ID: SB-456-7.0/9.0-XMS & SB-456-7.0/9.0-XMSD  
SDG: WIL-7  
Extracted by: JLP  
Extraction Method: 8033M  
Analyst: KT  
Analysis Method: SW846 8033M  
Lab Prep Batch: WG68776  
Units: mg/Kgdrwt

COMPOUND	MS SPIKE	MSD SPIKE	SAMPLE CONC.	MS CONC.	MSD CONC.	MS %REC.	MSD %REC.	%RPD %RPD	QC. LIMIT	QC. LIMITS
dimethylformamide	5.5	8.0	0.00	4.7	6.7	85	83	35	50	70-130

Data File: \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2080.d  
Report Date: 09-Oct-2009 10:23

Katahdin Analytical Services

Data file : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2080.d  
Lab Smp Id: WG68776-4 Client Smp ID: SB-456-7.0/9.0-XMS  
Inj Date : 08-OCT-2009 16:38  
Operator : KT Inst ID: gc11.i  
Smp Info : DMFB040A.M, GC11CJ08B1.B, 1, WG68776-4  
Misc Info : SW846 8033M  
Comment :  
Method : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\dmfB040A.m  
Meth Date : 09-Oct-2009 10:22 jprescott Quant Type: ESTD  
Cal Date : 08-OCT-2009 13:48 Cal File: BCJ2072.d  
Als bottle: 1 QC Sample: MS  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12

Concentration Formula: Amt \* DF \* (Vt/Vo)\*(100/(100-M)) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.04000	Volume of final extract (L)
Vo	0.00197	Sample Weight
M	7.978	% Moisture
Cpnd Variable		Local Compound Variable

Compounds	CONCENTRATIONS						REVIEW CODE
	RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN	FINAL	
					( mg/L )	(mg/Kgdrwt)	
1 dimethylformamide	3.666	3.707	-0.041	48240	0.21250	4.69 (M)	M5
\$ 2 diethylformamide	4.733	4.760	-0.027	39018	0.22915	5.06	

QC Flag Legend

M - Compound response manually integrated.

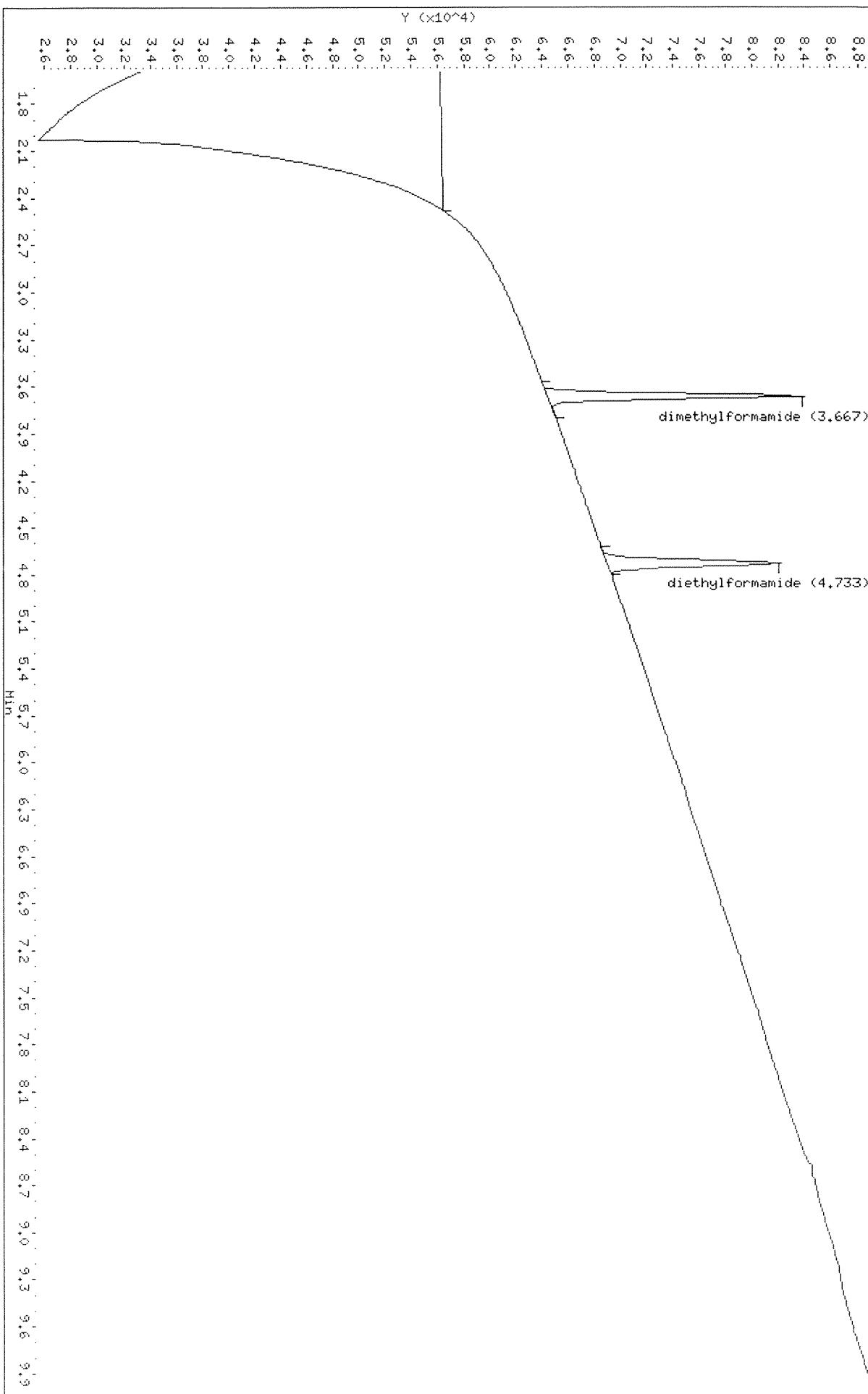
Data File: \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2080.d  
Date : 08-OCT-2009 16:38

Client ID: SB-456-7.0-9.0-XHS  
Purge Volume: 0.0

Column phase: ZB-WAX

Sample Info: DHFB040A.M,GC11CJ08B1.B,1,WG68776-4  
Instrument: gc11.i  
Operator: KT  
Column diameter: 0.53

\\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2080.d\BCJ2080.RAW



Data File: \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2082.d  
Report Date: 09-Oct-2009 10:23

Katahdin Analytical Services

Data file : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\BCJ2082.d  
Lab Smp Id: WG68776-5 Client Smp ID: SB-456-7.0/9.0-XMSD  
Inj Date : 08-OCT-2009 17:07  
Operator : KT Inst ID: gc11.i  
Smp Info : DMFB040A.M, GC11CJ08B1.B, 1, WG68776-5  
Misc Info : SW846 8033M  
Comment :  
Method : \\Target\_server\GG\chem\gc11.i\GC11CJ08B1.b\dmfB040A.m  
Meth Date : 09-Oct-2009 10:22 jprescott Quant Type: ESTD  
Cal Date : 08-OCT-2009 13:48 Cal File: BCJ2072.d  
Als bottle: 1 QC Sample: MSD  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: SW8033M.sub  
Target Version: 4.12

Concentration Formula: Amt \* DF \* (Vt/Vo)\*(100/(100-M)) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	0.04000	Volume of final extract (L)
Vo	0.00135	Sample Weight
M	7.978	% Moisture
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS		REVIEW CODE
					ON-COLUMN	FINAL	
					( mg/L )	(mg/Kgdrwt)	
1 dimethylformamide	3.680	3.707	-0.027	47154	0.20749	6.68 (M)	MS
\$ 2 diethylformamide	4.746	4.760	-0.014	40084	0.23478	7.56	

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Target\_server\GC\chem\gc11.i\GC11CJ08B1.b\BCJ2082.d  
Date : 08-OCT-2009 17:07

Client ID: SB-456-7.0/9.0-XNSD  
Purge Volume: 0.0

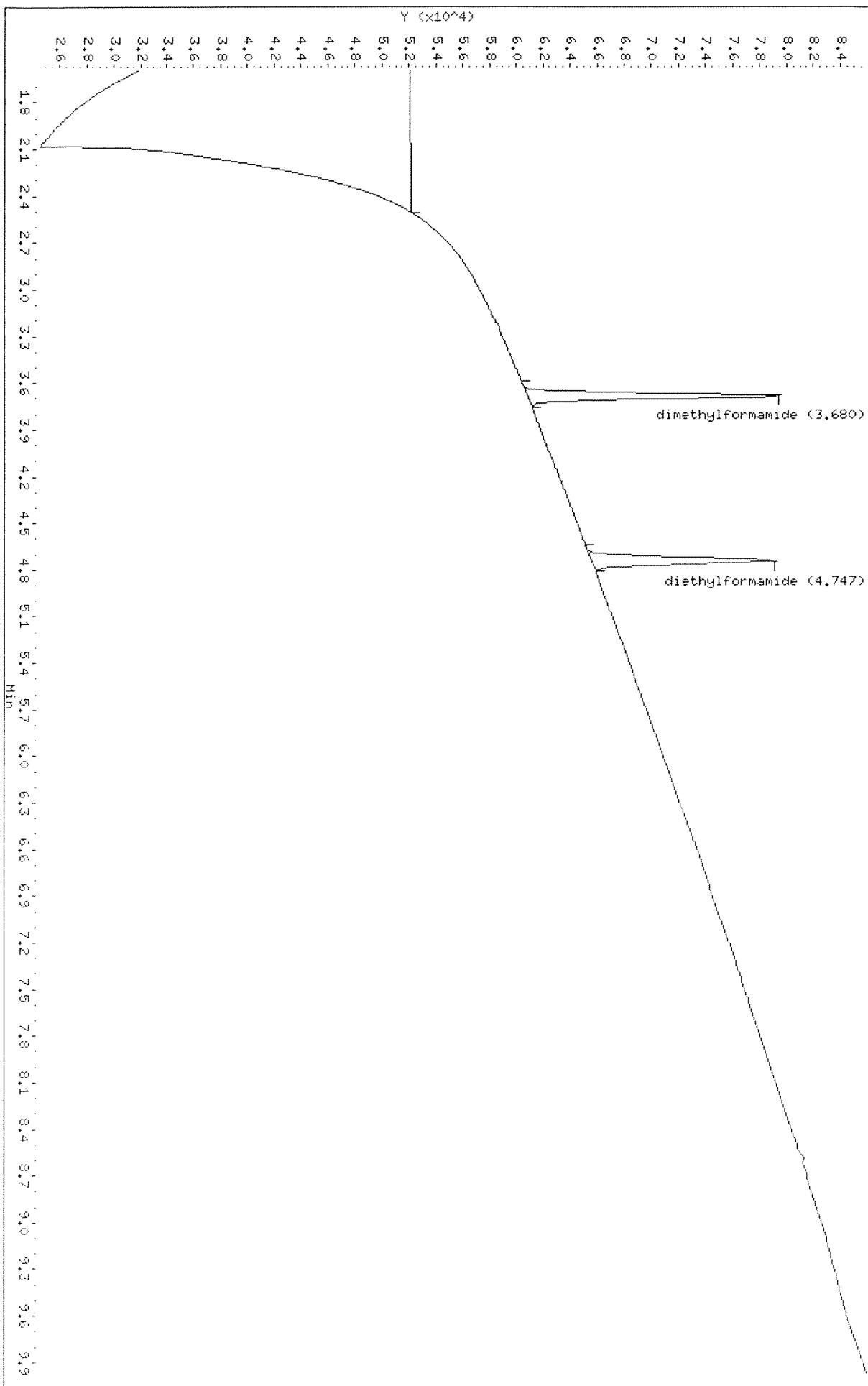
Column phase: ZB-WAX

\\Target\_server\GC\chem\gc11.i\GC11CJ08B1.b\BCJ2082.RAW

Instrument: gc11.i  
Operator: KT  
Column diameter: 0.53

dimethylformamide (3.680)

diethylformamide (4.747)



## **Logbooks and Supporting Documents**

Katahdin Analytical Services, Inc  
GC Laboratory Instrument Runlog  
Instrument GC11

Method (circle):  
SW846 8015M - Glycols  
SW846 8015M - Alcohols  
SW846 8015M - 2-MOE  
SW846 8033M - DMF  
Signal \_\_\_\_\_ Power \_\_\_\_\_

Reviewed by/Date: \_\_\_\_\_

Date	Init	Result File	Sample Number	Accept Y/N	Method Channel A: B:	Column	Comments
9-15-09	JWP	BCI4072	(aw pt test	Y	DMFB037A	227	
		73	ICAL 0.02	Y	DMFB038A		GCV2306
		74	↓ 0.05	Y			GCV2307
		75	↓ 0.1	Y			GCV2308
		76	W	N			
		77	ICAL 0.25	Y			GCV2309
		78	W	N			
		79	ICAL 0.5	Y			GCV2310
		80	W	N			
		81	W	N			GCV2311
		82	ICAL 1.0	Y			
		83	W	N			
		84	W				
		85	W	↓			
		86	W648400-1	Y			
		87	↓ -2	Y			
		88	W	N			
		89	W648400-3	Y			
		90	W	N			
		91	SC5104-10RA	B	Y		
		92	SC5142-8RA	↓	Y		
		93	SC5326-5RA	↓	Y		
		94	CV 0.25	Y			GCV2309
		95	W	N			
		96	SC4941-4RA	Y			
		97	SC4995-4RA	Y			
		98	↓ -2 RA	Y			

	STANDARD ID	uL added	STD. CODE	STD. CODE
1	Surrogate	5	GCV2305	2346
2	LCS	10	GCV2305	
3	CV	—	GCV2306	59
4				

JWP 091509  
JWP 091509

Katahdin Analytical Services, Inc  
GC Laboratory Instrument Runlog  
Instrument GC11

Method (circle):  
SW846 8015M - Glycols  
SW846 8015M - Alcohols  
SW846 8015M - 2-MOE  
SW846 8033M - DMF  
Signal \_\_\_\_\_ Power \_\_\_\_\_

Reviewed by/Date: \_\_\_\_\_

Date	Init	Result File	Sample Number	Accept Y/N	Method Channel A: B:	Column	Comments
9-18-09	JIP	BCJ6058	CJ 0.25	Y	DMFB038A	227	
1	JIP	BCJ6059	W	N	↓	↓	
9-27-09	JIP	60	CJ 0.25	N			↓
		(61)	W	N			
		62	CJ 0.25	Y			
		(63)	W	N			
		64	W668988-1	Y			
		65	↓ -2	Y			<del>DATA</del> JIP 092509
		66	W	N			
		67	W668988-3	Y			
		68	W	N			
		69	SC S605-6	A	Y		
		70	SCS606-21	A	Y		
		71	W668961-1	Y			
		72	↓ -2	Y			
		73	W	N			
		74	W668961-3	Y			
		75	W	N			
		76	CJ 0.25	Y			↓
		77	W	N			
		78	CJ 0.25	N			↓
		79	W	N			
		NEW liner + Supra					
		80	CJ 0.25	N			signal dropped
		81	W	N			
		82	CJ 0.25	N			↓
↓	↓	83	W	N	↓	↓	

	STANDARD ID	uL added	STD. CODE	STD. CODE
1	Surrogate	5uL	GCV2346	
2	LCS	10uL	GCV2305	
3	CV	—	GCV2309	
4				

Katahdin Analytical Services, Inc  
GC Laboratory Instrument Runlog  
Instrument GC11

Reviewed by/Date: \_\_\_\_\_

Method (circle):  
SW846 8015M - Glycols  
SW846 8015M - Alcohols  
SW846 8015M - 2-MOE  
SW846 8033M - DMF

Signal \_\_\_\_\_ Power \_\_\_\_\_

Date	Init	Result File	Sample Number	Accept Y/N	Method Channel A: B:	Column	Comments
10-8-09	JWP	PC112054	Water	N	DMFB040A	342	
		57	Prime	↓			
		58	Water	↓			
		59	ICAL 0.02	Y			GC112306
		60	↓ 0.05	↓			GC112307
		61	↓ 0.1	↓			GC112308
		62	W	↓			
		63	ICAL 0.25	Y			GC112309
		64	W	N			
		65	ICAL 0.5	N			↑ RESPONSE
		66	W	N			
		67	W	N			
		68	ICAL 1.0	Y			GC112311
		69	W	N			
		70	W	N			
		71	W	N			
		72	ICAL 0.5	Y			GC112310
		73	W	N			
		74	W	N			
	KIT	75	WG68776-1	Y			
		76	↓ -2	Y			spike ↓
		77	W	N			
		78	WG68776-3	T			
		79	W	N			
		80	WG68776-4	T			
		81	W	N			
		82	WG68776-5	T			

	STANDARD ID	uL added	STD. CODE	STD. CODE
1	Surrogate			
2	LCS			
3	CV			
4				

Katahdin Analytical Services, Inc  
 GC Laboratory Instrument Runlog  
 Instrument GC11

Method (circle):  
 SW846 8015M - Glycols  
 SW846 8015M - Alcohols  
 SW846 8015M - 2-MOE  
 SW846 8033M - DMF

Signal \_\_\_\_\_ Power \_\_\_\_\_

Reviewed by/Date: \_\_\_\_\_

Date	Init	Result File	Sample Number	Accept Y/N	Method Channel A: B:	Column	Comments
10-809	LT	BCJ20 83	W	N	DMF 8040R	242	
		84	SCS356-1	Y			
		85	SCS320-1	Y			
		86	↓ -2	Y			
		87	↓ -3	Y			
		88	↓ -4	Y			
		89	CJ 0.25	Y			
		90	W	Y			
		91	SCS415-1	Y			
		92	↓ -2	Y			
		93	↓ -3	Y			
		94	↓ -4	Y			
		95	↓ -5	Y			
		96	↓ -6	Y			
		97	↓ -7	Y			
		98	↓ -8	Y			
		99	↓ -9	Y			
		BCJ2100	WG68986-1	Y			
		101	CJ 0.25	Y			
		102	W	Y			
		103	WG68986-2	Y			Spike ↓
		104	W	Y			
		105	WG68986-3	Y			
		106	W	Y			
		107	SCS605-1	Y			
		108	↓ -2	Y			
		109	↓ -3	Y			

	STANDARD ID	uL added	STD. CODE	STD. CODE
1	Surrogate			
2	LCS			
3	CV	—	GCI2309	
4				

Katahdin Analytical Services, Inc  
GC Laboratory Instrument Runlog  
Instrument GC11

Reviewed by/Date: \_\_\_\_\_

Method (circle):  
SW846 8015M - Glycols  
SW846 8015M - Alcohols  
SW846 8015M - 2-MOE  
SW846 8033M - DMF  
Signal Power

	STANDARD ID	uL added	STD. CODE	STD. CODE
1	Surrogate			
2	LCS			
3	CV	—	(GCL 2409)	
4				

KATAHDIN ANALYTICAL SERVICES  
GC SOIL PREP LOG

Date of Sample Preparation	Analyst Initials	Sample #	Sample Weight (g)	Volume Measured (mL)	Spike ID and Volume (μL)	Surrogate ID and Volume (μL)	Method	Comments
9-17-09	JLP	W668776-1	0.98	40	N/A	200 μL GCN 2348	8033	Shaken Start: 1435 Stop: 0710
		-2	0.97		100 μL GCN 2304	100 μL GCN 2348		
		3	1.01		100 μL GCN 2304	100 μL GCN 2348		
		-4	1.97					SC5415-7MS A
		-5	1.35					↓ -7 MSD A
		SC5254-1A	1.07		N/A	200 μL GCN 2348	100 μL GCN 2348	
		SC5326-1	1.39					
		-2	1.47					
		-3	1.47					
		-4	1.41					
		SC5415-1	1.50					
		-2	1.05					
		-3	1.68					
		-4	1.34					
		-5	1.73					
								↓

Reviewed By \_\_\_\_\_

Date: \_\_\_\_\_

KATAHDIN ANALYTICAL SERVICES  
GC SOIL PREP LOG

DINH<sub>2</sub>O

Date of Sample Preparation	Analyst Initials	Sample #	Sample Weight (g)	Volume Neoband (mL)	Spike ID and Volume (µL)	Surrogate ID and Volume (µL)	Method	Comments
6-17-09	JUR	SCS15-LA	1.22	40	NA	200µl GC12348 100ug/ml	8033	JIP 091709

Reviewed By: \_\_\_\_\_

Date: \_\_\_\_\_

KATAHDIN ANALYTICAL SERVICES  
GC SOIL PREP LOG

Date of Sample Preparation	Analyst Initials	Sample #	Sample Weight (g)	Volume (mL)	Spiked Volume (mL)	Surrogate D and Volume (mL)	Method	Comments
01-23-09	JJP	W648986-1	0.98	40	NA	200µl GC V2346 100µl 6-CV 2346	8033	Shaked Start: 1430 Stop: 0710
				-2	1.00	100µl GC V2304 100µg/mL		
				-3	0.99	↓		
		SUS414-1A	1.48		NA	200µl GC V233-16 100µg/mL		
		SC5407-1	1.90					
				-2	1.92			
		SC5405-1	1.38					
				-2	1.17			
				-3	1.91	200µl GC V2348 100µg/mL		
				-4	1.83	↓		
				5	1.96	↓		
				↓	1.96	↓		
								JJP 092409

# **CONVENTIONAL AND PHYSICAL ANALYTICAL DATA**

## **QC Summary Section**

## Quality Control Report

### Blank Sample Summary Report

#### Total Solids

<u>Samp Type</u>	<u>QC Batch</u>	<u>Anal. Method</u>	<u>Anal. Date</u>	<u>Prep. Date</u>	<u>Result</u>	<u>PQL</u>
MBLANK	WG68699	ASTM D2216	16-SEP-09	15-SEP-09	U 1 %	1 %

## Quality Control Report

### Blank Sample Summary Report

#### **Total Solids**

<u>Samp Type</u>	<u>QC Batch</u>	<u>Anal. Method</u>	<u>Anal. Date</u>	<u>Prep. Date</u>	<u>Result</u>	<u>PQL</u>
MBLANK	WG68904	ASTM D2216	21-SEP-09	18-SEP-09	U 1 %	1 %

**Quality Control Report****Blank Sample Summary Report****Total Solids**

<u>Samp Type</u>	<u>QC Batch</u>	<u>Anal. Method</u>	<u>Anal. Date</u>	<u>Prep. Date</u>	<u>Result</u>	<u>PQL</u>
MBLANK	WG69073	ASTM D2216	24-SEP-09	23-SEP-09	U 1 %	1 %

# Quality Control Report

## Laboratory Control Sample Summary Report

Cert No E87604

### **Total Solids**

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG68699-2	LCS	WG68699	16-SEP-09	15-SEP-09	%	90	90.	100	80-120	

# Quality Control Report

## Laboratory Control Sample Summary Report

Cert No E87604

### Total Solids

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG68904-2	LCS	WG68904	21-SEP-09	18-SEP-09	%	90	90.	100	80-120	
WG68904-4	LCSD	WG68904	21-SEP-09	18-SEP-09	%	90	90.	100	80-120	0

# Quality Control Report

## Laboratory Control Sample Summary Report

Cert No E87604

**Total Solids**

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG69073-2	LCS	WG69073	24-SEP-09	23-SEP-09	%	90	90.	100	80-120	

# Quality Control Report

## Duplicate Sample Summary Report

**Total Solids**

Duplicate Sample ID	Original Sample ID	QC Batch	Analysis Date	Result Units	Sample Result	Duplicate Result	RPD(%)	RPD Limit
WG68904-5	SC5415-5	WG68904	21-SEP-09	%	93.	93.	0	20

## **Sample Data Section**

## **KATAHDIN ANALYTICAL SERVICES – INORGANIC DATA QUALIFIERS**

### **(Refer to BOD Qualifiers Page for BOD footnotes)**

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

- U Indicates the compound was analyzed for but not detected above the laboratory Practical Quantitation Limit.
- E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.
- J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Limit (PQL), but above the Method Detection Limit (MDL).
- I-7 The laboratory's Practical Quantitation Level could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.
- A-4 Please refer to cover letter or narrative for further information.
- MCL Maximum Contaminant Level
- NL No limit
- NFL No Free Liquid Present
- FLP Free Liquid Present
- NOD No Odor Detected
- TON Threshold Odor Number
- H1 Please note that the regulatory holding time for pH is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. pH for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.
- H2 Please note that the regulatory holding time for DO is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. DO for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.
- H3 Please note that the regulatory holding time for sulfite is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. Sulfite for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.
- H4 Please note that the regulatory holding time for residual chlorine is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. Residual chlorine for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.

## Report of Analytical Results

**Client:** Chris Ricardi  
 Mactec Engineering and Consulting  
 P.O. Box 7050 DTS  
 Portland, ME 04112-7050

**Lab Sample ID:** SC5256-1  
**Report Date:** 08-OCT-09  
**Client PO:** ERRE9844 REWI0014  
**Project:** Wilmington  
**SDG:** WIL-7

**Sample Description**

OC-SB-472-30/32-XXX

<b><u>Matrix</u></b>	<b><u>Date Sampled</u></b>	<b><u>Date Received</u></b>
SL	04-SEP-09	04-SEP-09

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
Total Solids	91. %	1	SM2540G	WG68699	16-SEP-09 08:30:00	ASTM D2216	15-SEP-09	JF	

## Report of Analytical Results

**Client:** Chris Ricardi  
 Mactec Engineering and Consulting  
 P.O. Box 7050 DTS  
 Portland, ME 04112-7050

**Lab Sample ID:** SC5326-1  
**Report Date:** 08-OCT-09  
**Client PO:** ERRE9844 REWI0014  
**Project:** Wilmington  
**SDG:** WIL-7

**Sample Description**

OC-SB-450-0.0/1.0-X

<b><u>Matrix</u></b>	<b><u>Date Sampled</u></b>	<b><u>Date Received</u></b>
SL	09-SEP-09	10-SEP-09

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
Total Solids	94. %	I	SM2540G	WG68904	21-SEP-09 10:00:00	ASTM D2216	18-SEP-09	JF	

## Report of Analytical Results

**Client:** Chris Ricardi  
 Mactec Engineering and Consulting  
 P.O. Box 7050 DTS  
 Portland, ME 04112-7050

**Lab Sample ID:** SC5326-2  
**Report Date:** 08-OCT-09  
**Client PO:** ERRE9844 REWI0014  
**Project:** Wilmington  
**SDG:** WIL-7

### Sample Description

OC-SB-450-8.0/10-XX

<u>Matrix</u>	<u>Date Sampled</u>	<u>Date Received</u>
SL	09-SEP-09	10-SEP-09

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
Total Solids	87. %	1	SM2540G	WG68904	21-SEP-09 10:00:00	ASTM D2216	18-SEP-09	JF	

## Report of Analytical Results

**Client:** Chris Ricardi  
 Mactec Engineering and Consulting  
 P.O. Box 7050 DTS  
 Portland, ME 04112-7050

**Lab Sample ID:** SC5326-3  
**Report Date:** 08-OCT-09  
**Client PO:** ERRE9844 REWI0014  
**Project:** Wilmington  
**SDG:** WIL-7

**Sample Description**

OC-SB-466-30/32-XXX

<b><u>Matrix</u></b>	<b><u>Date Sampled</u></b>	<b><u>Date Received</u></b>
SL	08-SEP-09	10-SEP-09

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
Total Solids	91. %	I	SM2540G	WG68904	21-SEP-09 10:00:00	ASTM D2216	18-SEP-09	JF	

## Report of Analytical Results

**Client:** Chris Ricardi  
 Mactec Engineering and Consulting  
 P.O. Box 7050 DTS  
 Portland, ME 04112-7050

**Lab Sample ID:** SC5326-4  
**Report Date:** 08-OCT-09  
**Client PO:** ERRE9844 REWI0014  
**Project:** Wilmington  
**SDG:** WIL-7

**Sample Description**

OC-SB-466-6.0/8.0-X

<b><u>Matrix</u></b>	<b><u>Date Sampled</u></b>	<b><u>Date Received</u></b>
SL	08-SEP-09	10-SEP-09

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
Total Solids	93. %	I	SM2540G	WG68904	21-SEP-09 10:00:00	ASTM D2216	18-SEP-09	JF	

## Report of Analytical Results

**Client:** Chris Ricardi  
 Mactec Engineering and Consulting  
 P.O. Box 7050 DTS  
 Portland, ME 04112-7050

**Lab Sample ID:** SC5415-1  
**Report Date:** 08-OCT-09  
**Client PO:** ERRE9844 REWI0014  
**Project:** Wilmington  
**SDG:** WIL-7

**Sample Description**

OC-SB-427-0.0/1.0-X

<b><u>Matrix</u></b>	<b><u>Date Sampled</u></b>	<b><u>Date Received</u></b>
SL	10-SEP-09	12-SEP-09

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
Total Solids	93. %	I	SM2540G	WG68904	21-SEP-09 10:00:00	ASTM D2216	18-SEP-09	JF	

## Report of Analytical Results

**Client:** Chris Ricardi  
 Mactec Engineering and Consulting  
 P.O. Box 7050 DTS  
 Portland, ME 04112-7050

**Lab Sample ID:** SC5415-2  
**Report Date:** 08-OCT-09  
**Client PO:** ERRE9844 REWI0014  
**Project:** Wilmington  
**SDG:** WIL-7

**Sample Description**

OC-SB-434-0.0/1.0-X

<b><u>Matrix</u></b>	<b><u>Date Sampled</u></b>	<b><u>Date Received</u></b>
SL	10-SEP-09	12-SEP-09

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
Total Solids	94. %	1	SM2540G	WG68904	21-SEP-09 10:00:00	ASTM D2216	18-SEP-09	JF	

## Report of Analytical Results

**Client:** Chris Ricardi  
 Mactec Engineering and Consulting  
 P.O. Box 7050 DTS  
 Portland, ME 04112-7050

**Lab Sample ID:** SC5415-3  
**Report Date:** 08-OCT-09  
**Client PO:** ERRE9844 REWI0014  
**Project:** Wilmington  
**SDG:** WIL-7

**Sample Description**

OC-SB-434-7.0/9.0-X

<b><u>Matrix</u></b>	<b><u>Date Sampled</u></b>	<b><u>Date Received</u></b>
SL	10-SEP-09	12-SEP-09

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
Total Solids	92. %	1	SM2540G	WG68904	21-SEP-09 10:00:00	ASTM D2216	18-SEP-09	JF	

## Report of Analytical Results

**Client:** Chris Ricardi  
 Mactec Engineering and Consulting  
 P.O. Box 7050 DTS  
 Portland, ME 04112-7050

**Lab Sample ID:** SC5415-4  
**Report Date:** 08-OCT-09  
**Client PO:** ERRE9844 REWI0014  
**Project:** Wilmington  
**SDG:** WIL-7

**Sample Description**

OC-SB-456-0.0/1.0-X

<b><u>Matrix</u></b>	<b><u>Date Sampled</u></b>	<b><u>Date Received</u></b>
SL	11-SEP-09	12-SEP-09

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
Total Solids	97. %	I	SM2540G	WG68904	21-SEP-09 10:00:00	ASTM D2216	18-SEP-09	JF	

## Report of Analytical Results

**Client:** Chris Ricardi  
Mactec Engineering and Consulting  
P.O. Box 7050 DTS  
Portland, ME 04112-7050

**Lab Sample ID:** SC5415-5  
**Report Date:** 08-OCT-09  
**Client PO:** ERRE9844 REWI0014  
**Project:** Wilmington  
**SDG:** WIL-7

**Sample Description**

OC-SB-456-16/18-XXX

<b><u>Matrix</u></b>	<b><u>Date Sampled</u></b>	<b><u>Date Received</u></b>
SL	11-SEP-09	12-SEP-09

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
Total Solids	93. %	I	SM2540G	WG68904	21-SEP-09 10:00:00	ASTM D2216	18-SEP-09	JF	

## Report of Analytical Results

**Client:** Chris Ricardi  
 Mactec Engineering and Consulting  
 P.O. Box 7050 DTS  
 Portland, ME 04112-7050

**Lab Sample ID:** SC5415-6  
**Report Date:** 08-OCT-09  
**Client PO:** ERRE9844 REWI0014  
**Project:** Wilmington  
**SDG:** WIL-7

**Sample Description**

OC-SB-456-7.0/9.0-D

<b><u>Matrix</u></b>	<b><u>Date Sampled</u></b>	<b><u>Date Received</u></b>
SL	11-SEP-09	12-SEP-09

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
Total Solids	94. %	I	SM2540G	WG68904	21-SEP-09 10:00:00	ASTM D2216	18-SEP-09	JF	

## Report of Analytical Results

**Client:** Chris Ricardi  
 Mactec Engineering and Consulting  
 P.O. Box 7050 DTS  
 Portland, ME 04112-7050

**Lab Sample ID:** SC5415-7  
**Report Date:** 08-OCT-09  
**Client PO:** ERRE9844 REWI0014  
**Project:** Wilmington  
**SDG:** WIL-7

**Sample Description**

OC-SB-456-7.0/9.0-X

**Matrix**

SL

**Date Sampled**

11-SEP-09

**Date Received**

12-SEP-09

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
Total Solids	92. %	I	SM2540G	WG68904	21-SEP-09 10:00:00	ASTM D2216	18-SEP-09	JF	

## Report of Analytical Results

**Client:** Chris Ricardi  
 Mactec Engineering and Consulting  
 P.O. Box 7050 DTS  
 Portland, ME 04112-7050

**Lab Sample ID:** SC5415-8  
**Report Date:** 08-OCT-09  
**Client PO:** ERRE9844 REWI0014  
**Project:** Wilmington  
**SDG:** WIL-7

**Sample Description**

OC-SB-457-0.0/1.0-X

<b><u>Matrix</u></b>	<b><u>Date Sampled</u></b>	<b><u>Date Received</u></b>
SL	11-SEP-09	12-SEP-09

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
Total Solids	95. %	1	SM2540G	WG68904	21-SEP-09 10:00:00	ASTM D2216	18-SEP-09	JF	

## Report of Analytical Results

**Client:** Chris Ricardi  
 Mactec Engineering and Consulting  
 P.O. Box 7050 DTS  
 Portland, ME 04112-7050

**Lab Sample ID:** SC5415-9  
**Report Date:** 08-OCT-09  
**Client PO:** ERRE9844 REWI0014  
**Project:** Wilmington  
**SDG:** WIL-7

**Sample Description**

OC-SB-457-8.0/10-XX

<b><u>Matrix</u></b>	<b><u>Date Sampled</u></b>	<b><u>Date Received</u></b>
SL	11-SEP-09	12-SEP-09

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
Total Solids	94. %	1	SM2540G	WG68904	21-SEP-09 10:00:00	ASTM D2216	18-SEP-09	JF	

## Report of Analytical Results

**Client:** Chris Ricardi  
 Mactec Engineering and Consulting  
 P.O. Box 7050 DTS  
 Portland, ME 04112-7050

**Lab Sample ID:** SC5605-1  
**Report Date:** 08-OCT-09  
**Client PO:** ERRE9844 REWI0014  
**Project:** Wilmington  
**SDG:** WIL-7

**Sample Description**

OC-SB-413-0.0/1.0-X

**Matrix**

SL

**Date Sampled**

17-SEP-09

**Date Received**

19-SEP-09

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
Total Solids	73. %	I	SM2540G	WG69073	24-SEP-09 09:00:00	ASTM D2216	23-SEP-09	JF	

## Report of Analytical Results

**Client:** Chris Ricardi  
 Mactec Engineering and Consulting  
 P.O. Box 7050 DTS  
 Portland, ME 04112-7050

**Lab Sample ID:** SC5605-2  
**Report Date:** 08-OCT-09  
**Client PO:** ERRE9844 REWI0014  
**Project:** Wilmington  
**SDG:** WIL-7

**Sample Description**

OC-SB-413-1.0/5.0-X

<b><u>Matrix</u></b>	<b><u>Date Sampled</u></b>	<b><u>Date Received</u></b>
SL	17-SEP-09	19-SEP-09

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
Total Solids	88. %	I	SM2540G	WG69073	24-SEP-09 09:00:00	ASTM D2216	23-SEP-09	JF	

## Report of Analytical Results

**Client:** Chris Ricardi  
 Mactec Engineering and Consulting  
 P.O. Box 7050 DTS  
 Portland, ME 04112-7050

**Lab Sample ID:** SC5605-3  
**Report Date:** 08-OCT-09  
**Client PO:** ERRE9844 REWI0014  
**Project:** Wilmington  
**SDG:** WIL-7

**Sample Description**

OC-SB-435-0.0/1.0-X

**Matrix**

SL

**Date Sampled**

17-SEP-09

**Date Received**

19-SEP-09

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
Total Solids	19. %	I	SM2540G	WG69073	24-SEP-09 09:00:00	ASTM D2216	23-SEP-09	JF	

## Report of Analytical Results

**Client:** Chris Ricardi  
Mactec Engineering and Consulting  
P.O. Box 7050 DTS  
Portland, ME 04112-7050

**Lab Sample ID:** SC5605-4  
**Report Date:** 08-OCT-09  
**Client PO:** ERRE9844 REWI0014  
**Project:** Wilmington  
**SDG:** WIL-7

**Sample Description**

OC-SB-435-11/15-XXX

**Matrix**

SL

**Date Sampled**

17-SEP-09

**Date Received**

19-SEP-09

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
Total Solids	92. %	1	SM2540G	WG69073	24-SEP-09 09:00:00	ASTM D2216	23-SEP-09	JF	

## Report of Analytical Results

**Client:** Chris Ricardi  
 Mactec Engineering and Consulting  
 P.O. Box 7050 DTS  
 Portland, ME 04112-7050

**Lab Sample ID:** SC5605-5  
**Report Date:** 08-OCT-09  
**Client PO:** ERRE9844 REWI0014  
**Project:** Wilmington  
**SDG:** WIL-7

**Sample Description**

OC-SB-435-6.0/10-XX

<b><u>Matrix</u></b>	<b><u>Date Sampled</u></b>	<b><u>Date Received</u></b>
SL	17-SEP-09	19-SEP-09

Parameter	Result	Adj PQL	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Analyst	Footnotes
Total Solids	92. %	1	SM2540G	WG69073	24-SEP-09 09:00:00	ASTM D2216	23-SEP-09	JF	

## **Raw Data Section**

TOTAL SOLIDS BATCH REPORT  
 Sep 16 2009, 09:27 am  
 Batch: WG68699

Sample	Matrix	Type	Batch	Prep Date	Tare	Initial	Final	by	Date	Raw TS	Rep TS	Recovery	RPD
SC5141-3	SL	SAMP	WG68699	15-SEP-09	1.017 g	6.765 g	6.035 g	JF	16-SEP-09	87.	%		
SC5142-1	SL	SAMP	WG68699	15-SEP-09	.986 g	8.146 g	7.936 g	JF	16-SEP-09	97.	%		
SC5142-2	SL	SAMP	WG68699	15-SEP-09	1.093 g	5.467 g	4.736 g	JF	16-SEP-09	83.	%		
SC5142-3	SL	SAMP	WG68699	15-SEP-09	1.078 g	6.514 g	6.042 g	JF	16-SEP-09	91.	%		
SC5142-4	SL	SAMP	WG68699	15-SEP-09	1.12 g	5.183 g	4.875 g	JF	16-SEP-09	92.	%		
SC5142-5	SL	SAMP	WG68699	15-SEP-09	1.088 g	4.874 g	4.152 g	JF	16-SEP-09	80.	%		
SC5255-1	SL	SAMP	WG68699	15-SEP-09	.999 g	5.589 g	5.243 g	JF	16-SEP-09	92.	%		
SC5255-2	SL	SAMP	WG68699	15-SEP-09	1.008 g	5.97 g	4.41 g	JF	16-SEP-09	68.	%		
SC5255-1	SL	SAMP	WG68699	15-SEP-09	1.010 g	6.809 g	6.278 g	JF	16-SEP-09	90.	%		
SC5385-1	SL	SAMP	WG68699	15-SEP-09	.992 g	4.805 g	4.645 g	JF	16-SEP-09	95.	%		
SC5385-2	SL	SAMP	WG68699	15-SEP-09	.995 g	5.106 g	4.478 g	JF	16-SEP-09	84.	%		
W68699-1	SL	NBLANK	WG68699	15-SEP-09	.947 g	.947 g	.946 g	JF	16-SEP-09	-0.	100.00	1.	%
WG68699-2	SL	LCS	WG68699	15-SEP-09	1.006 g	6.026 g	5.51 g	JF	16-SEP-09	89.	%		
WG68699-3	SL	DUP	WG68699	15-SEP-09	1.009 g	4.844 g	4.693 g	JF	16-SEP-09	96.	%		
Comments:													
SC5141-3		MS/MSD											
WG68699-1		SCS385-1											
WG68699-2		SCS385-1											
WG68699-3		SCS385-1											

Entered by: Jeffrey U

Date: 9/16/09  
 MS/MSD  
 SCS385-1  
 SCS385-1  
 SCS385-1

Katahdin Analytical Services 5000032

Date: 9/16/09

Accepted by: Jeffrey

Date: 9/16/09

## KATAHDIN ANALYTICAL SERVICES, INC.

TOTAL SOLIDS: ASTM D2216		PQL: 0.10% BALANCE ID: S-Antimony 01 300ml 10/12	
TOTAL VOLATILE SOLIDS: SM2540 G		PQL: 0.10% ASTM CLASS 1 WEIGHTS	
ANALYST IN:	ANALYST OUT:	TRUE WT	INITIAL WT
DATE IN:	DATE OUT:	(g)	(g)
TIME IN:	TIME OUT:	2.0000	2.0000
TEMP IN:	TEMP OUT:	5.0000	5.0000
Oven ID: 102 needs to be checked	Muffle Oven ID:		
CHECKED BY:	DATE:	10/09/16 16:09	10/09/16 16:02
SAMPLE ID	DISH ID	DISH WT (g)	DISH WET WT (g)
1	1	0.947	0.946
641	2	1.005	1.004
SC 53 85-1F	3	0.922	0.926
-3	4	1.009	1.005
6	5	0.995	1.006
1C5255-1A	6	0.999	1.009
1	7	1.008	1.000
SC 62 56-1A	8	1.010	1.009
SC 57 41-3A	9	1.017	1.015
SC 5254-18	10	0.981	1.000
SC 5224-67	11	0.996	1.012
Day -64	12	0.999	1.035
-8A	13	0.992	1.005
-3A	14	1.014	1.024
-4A	15	0.988	1.012
-5A	16	1.005	1.014
-7A	17	0.990	1.017
-8A	18	0.985	1.023
-9A	19	0.993	1.049
SC 5254-1A	20	0.986	1.046
-2A	21	1.093	1.467
3A	22	1.075	1.514
-4A	23	1.120	1.873
-5A	24	1.086	1.874

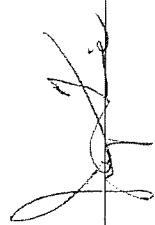
10/09/16 16:09

TOTAL SOLIDS BATCH REPORT  
Sep 21 2009, 10:25 am  
Batch: WG68904

Sample	Matrix	Type	Batch	Prep Date	Tare	Initial	Final	Date by	Date by	Raw TS	Rep TS	Recovery	RPD
SC5326-1	SL	SAMP	WG68904	18-SEP-09	1.1 g	5.668 g	5.409 g	JF	21-SEP-09	94.3300	94.	%	
SC5326-2	SL	SAMP	WG68904	18-SEP-09	1.129 g	7.24 g	6.442 g	JF	21-SEP-09	86.1420	87.	%	
SC5326-3	SL	SAMP	WG68904	18-SEP-09	1.099 g	5.362 g	5.013 g	JF	21-SEP-09	91.1720	91.	%	
SC5326-4	SL	SAMP	WG68904	18-SEP-09	1.098 g	6.764 g	6.377 g	JF	21-SEP-09	93.1700	93.	%	
SC5415-1	SL	SAMP	WG68904	18-SEP-09	1.063 g	5.088 g	4.811 g	JF	21-SEP-09	93.1180	93.	%	
SC5415-2	SL	SAMP	WG68904	18-SEP-09	1.089 g	5.527 g	5.245 g	JF	21-SEP-09	93.6460	94.	%	
SC5415-3	SL	SAMP	WG68904	18-SEP-09	1.095 g	6.15 g	5.722 g	JF	21-SEP-09	91.5330	92.	%	
SC5415-4	SL	SAMP	WG68904	18-SEP-09	1.097 g	6.122 g	5.983 g	JF	21-SEP-09	97.2340	97.	%	
SC5415-5	SL	SAMP	WG68904	18-SEP-09	1.088 g	7.068 g	6.656 g	JF	21-SEP-09	93.1100	93.	%	
SC5415-6	SL	SAMP	WG68904	18-SEP-09	1.094 g	7.262 g	6.913 g	JF	21-SEP-09	94.3420	94.	%	
SC5415-7	SL	SAMP	WG68904	18-SEP-09	1.112 g	5.386 g	5.045 g	JF	21-SEP-09	92.0220	92.	%	
SC5415-8	SL	SAMP	WG68904	18-SEP-09	1.113 g	7.283 g	6.971 g	JF	21-SEP-09	94.9430	95.	%	
SC5415-9	SL	SAMP	WG68904	18-SEP-09	1.11 g	6.34 g	6.009 g	JF	21-SEP-09	93.5710	94.	%	
SC5550-1	SL	SAMP	WG68904	18-SEP-09	1.095 g	5.31 g	5.247 g	JF	21-SEP-09	98.5050	98.	%	
WG68904-1	MBLANK	WG68904	18-SEP-09	1 g	1 g	1 g	0.000 g	JF	21-SEP-09	0.0000	1	%	
WG68904-2	SL	LCS	WG68904	18-SEP-09	.999 g	6.011 g	5.496 g	JF	21-SEP-09	89.7250	90.	%	
WG68904-4	SL	LCSD	WG68904	18-SEP-09	1.008 g	6.025 g	5.51 g	JF	21-SEP-09	89.7350	90.	%	
WG68904-5	SL	DUP	WG68904	18-SEP-09	1.119 g	7.083 g	6.69 g	JF	21-SEP-09	93.4100	93.	%	

Comments:

SC5415-7  
MS/MSD  
SC5415-5  
WG68904-1  
SCS415-5  
WG68904-2  
SCS415-5  
WG68904-4  
SCS415-5  
WG68904-5  
SCS415-5

Entered by:   
Date: 9-21-2009

Accepted by:   
Date: 9-21-2009

Date:   
Date: 9-21-2009

## KATAHDIN ANALYTICAL SERVICES, INC.

TOTAL SOLIDS: ASTM D2216		PQL: 0.10%		BALANCE ID: <i>Sample 1 from seal 2</i>	
TOTAL VOLATILE SOLIDS: SM2540 G		E160.4		PQL: 0.10% ASTM CLASS 1 WEIGHTS	
ANALYST IN:	<i>Jef</i>	ANALYST OUT:	<i>Jef</i>	TRUE WT (g)	INITIAL WT (g)
DATE IN:	9-16-05	DATE OUT:	9-26-05		
TIME IN:	1552	TIME OUT:	1622	2.0000	2.000
TEMP IN:	105	TEMP OUT:	105	5.0000	4.999
Oven ID:	107	Muffle Oven ID:		10.0000	10.000
CHECKED BY:	<i>Jef</i>	DATE:	09/26/05	100.0000	
SAMPLE ID	DISH ID	DISH WT (g)	DISH WET WT (g)	DISH DRY WT (g)	DISH/ASH WT (g)
SC 6528-11E (20)	4T	1.000	1.000	1.000	1.000
SC 5550-18	46	0.999	0.999	0.996	0.996
SC 5326-19	47	1.008	1.025	1.025	1.021
SC 5326-19	51	0.948	0.948	0.948	0.948
SC 5326-19	52	0.988	0.988	0.988	0.988
SC 5326-19	53	1.095	1.100	1.095	1.095
SC 5326-19	54	1.129	1.129	1.129	1.129
SC 5326-19	55	1.099	1.100	1.099	1.099
SC 5326-19	56	1.099	1.100	1.099	1.099
SC 5326-19	57	1.098	1.100	1.098	1.098
SC 5326-19	58	1.063	1.063	1.063	1.063
SC 5326-19	59	1.089	1.095	1.089	1.089
SC 5326-19	60	1.097	1.119	1.097	1.097
SC 5326-19	61	1.094	1.119	1.094	1.094
SC 5326-19	62	1.112	1.112	1.112	1.112
SC 5326-19	63	1.113	1.113	1.113	1.113
SC 5326-19	64	1.110	1.110	1.110	1.110

TOTAL SOLIDS BATCH REPORT  
 Sep 24 2009, 01:49 pm  
 Batch: WG69073

Sample	Matrix	Type	Batch	Prep Date	Tare	Initial	Final	Date by	Raw TS	Rep TS	Recovery	RPD
SC5605-1	SL	SAMP	WG69073	23-SEP-09	1.095 g	4.173 g	3.349 g	JF	24-SEP-09	73.2290	73.	%
SC5605-2	SL	SAMP	WG69073	23-SEP-09	1.064 g	5.538 g	5.026 g	JF	24-SEP-09	88.5560	88.	%
SC5605-3	SL	SAMP	WG69073	23-SEP-09	1.092 g	5.754 g	1.991 g	JF	24-SEP-09	19.2840	19.	%
SC5605-4	SL	SAMP	WG69073	23-SEP-09	1.118 g	7.985 g	7.414 g	JF	24-SEP-09	91.6850	92.	%
SC5605-5	SL	SAMP	WG69073	23-SEP-09	1.119 g	5.943 g	5.533 g	JF	24-SEP-09	91.5010	92.	%
SC5605-6	SL	SAMP	WG69073	23-SEP-09	1.089 g	7.405 g	2.464 g	JF	24-SEP-09	21.7700	22.	%
SC5605-10	SL	SAMP	WG69073	23-SEP-09	1.102 g	5.33 g	4.531 g	JF	24-SEP-09	81.1020	81.	%
SC5606-11	SL	SAMP	WG69073	23-SEP-09	1.079 g	6.723 g	5.948 g	JF	24-SEP-09	86.2690	86.	%
SC5606-12	SL	SAMP	WG69073	23-SEP-09	1.12 g	5.993 g	5.106 g	JF	24-SEP-09	81.7980	82.	%
SC5606-13	SL	SAMP	WG69073	23-SEP-09	1.1 g	7.976 g	5.188 g	JF	24-SEP-09	59.4530	59.	%
SC5606-2	SL	SAMP	WG69073	23-SEP-09	1.094 g	6.63 g	5.378 g	JF	24-SEP-09	77.3840	77.	%
SC5606-3	SL	SAMP	WG69073	23-SEP-09	1.072 g	7.251 g	6.706 g	JF	24-SEP-09	91.1800	91.	%
SC5606-4	SL	SAMP	WG69073	23-SEP-09	1.093 g	4.389 g	3.759 g	JF	24-SEP-09	80.8860	81.	%
SC5606-5	SL	SAMP	WG69073	23-SEP-09	1.133 g	8.283 g	7.102 g	JF	24-SEP-09	83.4820	83.	%
SC5606-6	SL	SAMP	WG69073	23-SEP-09	1.107 g	5.26 g	4.664 g	JF	24-SEP-09	85.2380	85.	%
SC5606-7	SL	SAMP	WG69073	23-SEP-09	1.097 g	4.73 g	4.096 g	JF	24-SEP-09	82.5490	82.	%
SC5606-8	SL	SAMP	WG69073	23-SEP-09	1.075 g	4.593 g	4.111 g	JF	24-SEP-09	86.2990	86.	%
SC5606-9	SL	SAMP	WG69073	23-SEP-09	1.102 g	4.275 g	3.681 g	JF	24-SEP-09	81.2800	81.	%
SC5636-1	SL	SAMP	WG69073	23-SEP-09	1.094 g	4.386 g	3.8 g	JF	24-SEP-09	82.1990	82.	%
SC5636-2	SL	SAMP	WG69073	23-SEP-09	1.078 g	4.977 g	4.568 g	JF	24-SEP-09	89.5100	90.	%
WG69073-1	SL	NBLANK	WG69073	23-SEP-09	1.074 g	1.074 g	1.076 g	JF	24-SEP-09	0.2000	1	%
WG69073-2	SL	LCS	WG69073	23-SEP-09	1.11 g	6.129 g	5.608 g	JF	24-SEP-09	89.6190	90.	%
WG69073-3	SL	DUP	WG69073	23-SEP-09	1.088 g	4.392 g	3.836 g	JF	24-SEP-09	83.1720	83.	%
WG69073-4	SL	DUP	WG69073	23-SEP-09	1.097 g	4.347 g	3.759 g	JF	24-SEP-09	81.9080	82.	%

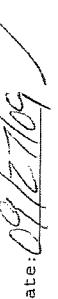
Comments:

WG69073-1  
 SC5636-1  
 WG69073-2  
 SC5636-1  
 WG69073-3  
 SC5636-1  
 WG69073-4  
 SC5606-4

Entered by:

Date: 9-24-09

Accepted by:   
 Date: 9-24-09

Approved by:   
 Date: 9-24-09

## KATAHDIN ANALYTICAL SERVICES, INC.

TOTAL SOLIDS: ASTM D2216	PQL: 0.10%	BALANCE ID:	5'AC-T0215 3-0225-22
TOTAL VOLATILE SOLIDS: SM2540 G	E160.4	PQL: 0.10% ASTM CLASS 1 WEIGHTS	
ANALYST IN:	ANALYST OUT:	TRUE WT (g)	FINAL WT (g)
DATE IN: 2-22-05	DATE OUT: 2-24-05	2.0000	2.0022
TIME IN: 1700	TIME OUT: 1800	5.0000	5.0022
TEMP IN: 105	TEMP OUT: 105		5.0022
Oven ID: 07 Newell	Muffle Oven ID: 09/27709	10.0000	10.0000
CHECKED BY: J. T. J.	DATE: 09/27/09	100.0000	100.0000
SAMPLE ID	DISH ID	DISH WT (g)	DISH WET WT (g)
-1 Blanks	1	1.074	1.076
-2 Ref	2	1.110	1.123
Sample 36-1D	3	1.094	1.086
-3 Dd -ID	4	1.085	1.078
-2e	5	1.078	1.077
Sample 37	6	1.095	1.073
-2a	7	1.064	1.053
-34	8	1.092	1.054
-44	9	1.048	1.035
-54	10	1.119	1.043
Sample 38-1A	11	1.089	1.065
-24	12	1.094	1.030
-34	13	1.072	1.057
-44	14	1.093	1.049
-54	15	1.087	1.047
-64	16	1.033	0.991
-74	17	1.097	1.040
-84	18	1.075	1.073
-94	19	1.072	1.075
-104	20	1.024	0.991
-114	21	1.024	0.991
-124	22	1.079	1.023
-134	23	1.022	0.983
-144	24	1.006	0.955

wt60073